Form 3160-3 (July 1992)

## **UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT**

SUBMIT IN TRIPLICATE\*

FORM APPROVED

OMB NO. 1040-0136 Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.

UTU-73456 6. IF INDIAN, ALLOTTEE OR TRIBE NAME

| APPLICATION FOR PERMIT TO DRILL OR DEEPEN                   |                   |                  |                      |                           |   | N/  | /A                                    |
|---|-------------------|------------------|----------------------|---------------------------|---|---|---------------------------------------|
| TYPE OF WORK  |                   |                  |                      |                           |   | 7. UNIT AGREEMENT NAM                               | 1E                                    |
| DR  | RILL 🗹            |                  |                      | DEEPEN 🗆                  |   | Big V   | /alley                                |
| TYPE OF WELL  |                   |                  |                      | 8. FARM OR LEASE NAME     | E, WELL NO.                                     |   |                                       |
| □ □ ☑ SINGLE ☑ MULTIPLE □ DIL WELL GAS WELL OTHER ZONE ZONE |                   |                  |                      | 12SWD-5-9-24              |   |   |                                       |
| 2. NAME OF OPERA  |                   |                  |                      | Contact: Rick Car         | nterbury  | 1   | · · · · · · · · · · · · · · · · · · · |
| QUESTAR EXP   | LORATION &        | PRODUCTION       | ı, co.               |                           | c.canterbury@questar.com                        | 43-0  | 147-40341                             |
| 3. ADDRESS  |                   |                  | Telphone number      |                           | 10. FIELD AND POOL, OR                          | WILDCAT 79  |                                       |
| 11002 East 17500 South Vernal, Utah 84078                   |                   |                  | Phone 435-           | 781-4362 Fax 435-781-4395 | Red Was   | on South BIYVUILLE                                  |                                       |
| 4. LOCATION OF WELL (Report location clearly and in a       |                   |                  | ccordance with an    | d State requirements*)    | equirements*) 11. SEC.,T, R, M, OR BLK & SURVEY |   |                                       |
| At Surface ( 49789 X 2033' FSL 859' FWL                     |                   |                  |                      | ., NWSW Section 5,        | , T9S, R24E                                     |   |                                       |
| At proposed production zone 44360384 4                      |                   |                  | ).063188 -109.243672 |                           | SEC. 5, T9S, R24E S.L.B.M.                      |   |                                       |
| 14. DISTANCE IN MILES FROM NEAREST TOWN OR PO               |                   |                  | VN OR PO             | STOFFICE*                 |   | 12. COUNTY OR PARISH                                | 13. STATE                             |
| 35.4+ / - MILES FRO   | OM VERNAL,        | UTAH             |                      |                           |   | Uintah  | UT                                    |
| 15. DISTANCE FRO  |                   |                  | TO NEARI             | EST                       | 16.NO.OF ACRES IN LEASE                         | 17. NO. OF ACRES ASSIG                              | NED TO THIS WELL                      |
| PROPERTY OR L   | •                 |                  |                      |                           |   |   |                                       |
| (also to nearest d  | irig,unit iine ii | r any)           |                      |                           | 1239.79 40                                      |   | 0                                     |
| 859' +/- ַ  |                   |                  |                      |                           |   |   |                                       |
| 18.DISTANCE FROM  |                   |                  | earest we            | ll, drilling,             | 19. PROPOSED DEPTH                              | 20. BLM/BIA Bond No. ES<br>UIC Bond No. 965-003-769 |                                       |
| completed, applied for, on this lease, ft                   |                   |                  |                      | 1900'                     | UIC BONG NO. 965-003-769                        | 9   |                                       |
| 25' +/-   |                   |                  |                      |                           |   |   |                                       |
| 21. ELEVATIONS (Show whether DF, RT, GR, ect.)              |                   |                  |                      | 22. DATE WORK WILL START  | 23. Estimated duration                          |   |                                       |
| 5127.0' GR  |                   |                  |                      |                           | ASAP  | 10 Days   |                                       |
| 24. Attachments   |                   |                  |                      |                           |   |   |                                       |
|   |                   |                  |                      |                           |   |   |                                       |
| The following,comp  | pleted in acco    | ordance with the | ne requirn           | nents of Onshore O        | il and Gas Order No. 1, shall be a              | attached to this form:                              |                                       |

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan

APPROVED BY

- 3. A surface Use Plan (if location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an exisiting bond on file (see Item 20 above).
- 5. Operator certification.
- 6. Such other site specific information and/or plans as may be required by the authorized officer.

| SIGNED              | Vule Conter                | Suy Name | (printed/typed) | Rick Canterbury | DATE | 08/22/2008 |  |
|---------------------|----------------------------|----------|-----------------|-----------------|------|------------|--|
| •                   |                            |          |                 |                 |      |            |  |
| TITLE               | Regulatory Affairs         |          |                 |                 |      |            |  |
| (This space for Fed | leral or State office use) |          |                 |                 |      |            |  |
|                     | 1/2 040 11 211             |          | N.c.            |                 |      |            |  |

\*See Instructions On Reverse Side

DATE 8-08-08

Title 18 U.S.C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of

United States any false, fictitious or fraudulent statements or representations as to any mater within its jurisdiction

**RECEIVED** AUG 2 5 2008

Federal Approval of this Action is Necessary

DIV. OF OIL, GAS & MINING

#### T9S, R24E, S.L.B.&M. QUESTAR EXPLR. & PROD. Well location, RWS #12SWD-5-9-24, located as shown in the NW 1/4 SW 1/4 of Section 5, T9S, R24E. S.L.B.&M. Uintah County, Utah. T8SS89'55'E - 2641.32' (G.L.O.) N89°50'10"W - 2650.50' (Meas.) BASIS OF ELEVATION T9S1916 Brass 1916 Brass Cap 2.0' High Cap 1.0' High, Pile of Stone BENCH MARK 45EAM LOCATED IN THE NW 1/4 SW 1/4 OF Pile of Stone Ö SECTION 6, T9S, R24E, S.L.B.&M. TAKEN FROM THE BONANZA, (G.L. QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. LOT 4 (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES LOT 3 LOT 2 LOT 1 DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID 508.00 ELEVATION IS MARKED AS BEING 5350 FEET. BASIS OF BEARINGS BASIS OF BEARINGS IS A G.P.S. OBSERVATION. N00.09'E S0073'26 1977 Brass Cap 0.5' High, 1977 Brass Steel Post Cap 0.8' High, Steel Post (Meas. RWS #12SWD-5-9-24 859 'Elev. Ungraded Ground = 5127' 24 2648. SCALE CERTIFICATE W.. ZO. LO. OON THIS IS TO CERTIFY THAT THE ABOVE TO THE PARED FROM FIELD NOTES OF ACTUAL SURVEYS WATER DIMENSION AND THAT THE SAME ARE THE AND CORPET TO T NO0'02'23 BEST OF MY KNOWLEDGE AND 1977 Brass Cap 0.5' High, Steel Post N89°46'37"W - 2643.10' (Meas.) N89°55'58"W - 2641.71' (Meas.) 1977 Brass Cap 1977 Brass Cap 0.5' Above 1.5 UINTAH ENGINEERING 0.6' High, High Pile & ` Scattered Stones of Stones 85 SOUTH 200 EAST -VERNAL, UTAH 84078 (AUTONOMOUS NAD 83) (435) 789-1017 LATITUDE = $40^{\circ}03'47.96"$ (40.063322) LEGEND: SCALE DATE SURVEYED: DATE DRAWN: LONGITUDE = 109'14'39.64'' (109.244344) 1" = 1000'2-7-08 2-11-08 = 90' SYMBOL (AUTONOMOUS NAD 27) PARTY REFERENCES D.R. A.W. C.P. = PROPOSED WELL HEAD. LATITUDE = $40^{\circ}03'48.08"$ (40.063356) G.L.O. PLAT WEATHER = SECTION CORNERS LOCATED. LONGITUDE = 109'14'37.21'' (109.243669) COLD QUESTAR EXPLR. & PROD.

#### **Additional Operator Remarks**

Questar Explor. & Prod. Co. proposes to drill a produced fluids disposal well to a total vertical depth of 1,900'. A copy of the Underground Injection Control Permit Application submitted to the Environmental Protection Agency (EPA) is enclosed.

The Application includes: Drilling Plan, Geologic and Proposed Injection Data.

Injection into the well will not commence until EPA provides written permission to inject.

The proposed well will be on the existing location of the RWS 12ML-5-9-24 (API #43-047-37309).

Questar Exploration & Production Co. agrees to the terms and conditions of the lease.

Bond coverage for this well is provided by Bond No.ESB000024. The principal is Questar Explor. & Prod. Co. via surety as consent as provided for the 43 CFR 3104.2. The operation of the Produced Fluid Disposal Well approved by the EPA is covered under Surety Bond 965-003-769.

# ONSHORE OIL & GAS ORDER NO. 1 Questar Exploration & Production RWS 12SWD-5-9-24

#### **DRILLING PROGRAM**

# ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

# 1. Formation Tops

The estimated tops of important geologic markers are as follows:

| Formation    | Depth, TVD |
|--------------|------------|
| Uinta        | Surface    |
| Green River  | 1,560'     |
| Casing Point | 1,760'     |
| Bird's Nest  | 1,780'     |
| TD           | 1,900'     |

# 2. Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

| <b>Substance</b> | <u>Formation</u> | Depth, TVD |
|------------------|------------------|------------|
| Water            | Bird's Nest      | 1,780'     |

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right # A36125 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal Site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

# 3. Operator's Specification for Pressure Control Equipment:

It is proposed to drill the surface hole with air or air/mist and no standardized pressure control equipment will be in place. A diverter system in will be in place instead.

#### 4. Casing Program

| Hole<br>Size | Csg.<br>Size | Top<br>(MD) | Bottom (MD) | Wt.   | Grade   | Thread | Cond. |
|--------------|--------------|-------------|-------------|-------|---------|--------|-------|
| 20"          | 14"          | sfc         | 40'         | Steel | Cond.   | None   | Used  |
| 12-1/4"      | 9-5/8"       | sfc         | 1,760'      | 47.0  | HCP-110 | LTC    | New   |

| Casing S | trengths: |         |     | Collapse  | Burst     | Tensile<br>(minimum) |
|----------|-----------|---------|-----|-----------|-----------|----------------------|
| 9-5/8"   | 47.0 lb.  | HCP-110 | LTC | 7,100 psi | 9,440 psi | 1,213,000 lb.        |

#### 5. <u>Cementing Program</u>

#### 14" Conductor:

Cement to surface with construction cement.

#### 9-5/8" Surface Casing: sfc - 1,760' (MD)

**Lead Slurry:** 0' – 1000'. 265 sks (630 cu ft) VARICEM (TM) cement, CBM Lite with Bridging Package. Slurry wt: 12.3 ppg, Slurry yield: 2.38 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 100% excess.

**Tail Slurry:** 1000' – 1760'. 225 sks (480 cu ft) VARICEM (TM) cement + 0.2% Super CBL (gas migration control), CBM Lite with Bridging Package. Slurry wt: 12.8 ppg, Slurry yield: 2.12 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 100% excess.

Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

#### 6. Auxiliary Equipment

- A. Kelly Cock yes
- B. Float at the bit no
- C. Monitoring equipment on the mud system none planned

# ONSHORE OIL & GAS ORDER NO. 1 Questar Exploration & Production RWS 12SWD-5-9-24

#### DRILLING PROGRAM

- D. Full opening safety valve on the rig floor yes
- E. Rotating Head no
- F. Request for Variance

Drilling surface hole with air:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III Requirements, subsection E. Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is 1,760 feet and high pressures are not expected.

- 1. **Properly lubricated and maintained rotating head** A diverter system in place of a rotating head. The diverter system forces the air and cutting returns to the reserve pit and is used to drill the surface casing.
- 2. Blooie line discharge 100 feet from wellbore and securely anchored the blooie line discharge for this operation will be located 50 to 70 feet from the wellhead. This reduced length is necessary due to the smaller location size to minimize surface disturbance.
- 3. Automatic igniter or continuous pilot light on blooie line a diffuser will be used rather than an automatic pilot/igniter. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
- 4. Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the wellbore compressors located within 50 feet on the opposite side of the wellbore from the blooie line and is equipped with 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
- 5. **Kill Fluid to control well** In lieu of having mud products on location to kill the well for an unanticipated kick, Questar will kill the well with water contained in a 400 bbl tank on site. The 400 bbl water tank will also be storage for surface casing cement water.
- 6. **Deflector on the end of the blooie line** Questar will mount a deflector unit at the end of the blooie line for the purpose of changing the direction and velocity of the air and cuttings flow into the reserve pit. Changing the velocity and direction of the cuttings and air will preserve the pit liner. In the event the deflector washes out due to erosion caused by the sand blasting effect of the cuttings, there will be no problem because the deflector is mounted on the very end of the blooie. A washed out deflector will be easily replaced.
- 7. Flare Pit there will be no need of a flare pit during the surface hole air drilling operation because the blooie line is routed directly to the reserve pit.

# ONSHORE OIL & GAS ORDER NO. 1 Questar Exploration & Production RWS 12SWD-5-9-24

#### **DRILLING PROGRAM**

G. All other operations and equipment for air/gas drilling shall meet specifications in Onshore Order #2, Section III Requirements, subsection E. Special Drilling Operations and Onshore Order #1.

Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. Maximum anticipated mud weight is 8.5 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

#### 7. Testing, logging and coring program

- A. Cores none anticipated
- B. DST none anticipated
- C. Logging GR-SP-Induction-Neutron Density 80' to TD GR Cement bond log surface to 9-5/8" casing shoe
- D. Formation and Completion Interval: Green River/Bird's Nest interval, final determination of completion will be made by analysis of logs.
   Stimulation: Stimulation will be designed for the particular area of interest as encountered.

# 8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated. No  $H_2S$  has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 850 psi. Maximum anticipated bottom hole temperature is  $110^{\circ}$  F.

# SURFACE USE PLAN OF OPERATIONS QUESTAR EXPLORATION AND PRODUCTION COMPANY RWS #12SWD-5-9-24 NWSW (859' FWL & 2033' FSL) SECTION 5, T9S.,R24E., S.L.B.& M

#### FEDERAL LEASE UTU-73456

#### 1. Existing Roads

Access from Vernal, Utah will be to proceed east and then south on Highway 40 approximately 3.9 miles thru Naples to the junction of State Highway 45. Exit right and proceed southerly and then in a southeasterly direction approximately 31.5 miles on highway 45 to the junction of an existing road to the southwest. Turn right and proceed in a southwesterly direction approximately 2.5 miles to the junction of an existing road to the northwest. Turn right and proceed in a northwesterly direction for a distance of 300 feet to the proposed well location. Total distance from Vernal, Utah to the proposed well location is approximately 37.9 miles.

No improvements are planned to existing roads. See attached topographic maps A and B for location of the access road.

#### 2. New or Reconstructed Access Roads

No new road construction is planned. The existing road to the RWS #12ML-5-9-24 will be used for access to this well. Refer to Topo map B for location of the existing access road to the well from Hatch Reservoir Road.

#### 3. Location of Existing Wells

See the attached Map C for the location of wells within a one mile radius.

#### 4. Location of Existing and/or Proposed Production Facilities

See the Figure #4 for the Production Facility Layout.

## 5. Location and Type of Water Supply

If water is required for drilling purposes, it will be obtained from Wonsits Valley Water Right # A 36125 (which was filed on May 7<sup>th</sup>, 1964) or Red Wash Water Right # 49-2153 (which was filed on March 25<sup>th</sup>, 1960). It has been determined by the Fish and Wildlife Service any water right filed before 1989 is not depleting to the Upper Colorado River System.

#### 6. <u>Construction Materials</u>

No additional materials other than native materials will be required to construct this location.

#### 7. Methods for Handling Waste Disposal

This well will be drilled with air. The pit will be constructed to the dimensions shown on Figure #1. Drill hole cuttings will be contained in the reserve pit and will be buried in place when the reserve has been allowed to dry and the location is reclaimed.

#### 8. Ancilliary Facilities

None are planned.

#### 9. Wellsite Layout

The proposed well will be located on an existing location of 12ML-5-9-24. See Figure 1 for proposed location layout.

#### 10. Plans for Surface Reclamation

At the time of reclamation, all production facilities will be removed from the location. Any trash will be picked up and removed from the location. The location will be reclaimed by placing fills back into cuts and recontouring the location to original contour or slope of the ground. The topsoil will be reapplied to the location and the location will be reseeded with Seed Mix #1 which is Fourwing Salt bush 3 lbs/acre, Indian Ricegrass, 3 lbs/acre, Needle and Thread, 1 lb/acre and Hycrest Crested Wheatgrass, 4 lbs/acre.

Interim Reclamation: During the operation period of the salt water disposal facility, QEP will reclaim as much of the well location as possible by recountouring (reducing cuts and fills where possible) and reseeding.

#### 11. Surface Ownership

Surface ownership is the Bureau of Land Management

Vernal Field Office 170S.,500E Vernal, Utah, 84078 435-781-4400.

#### 12. Other Information

Exisiting COAs will apply.

A class I archaeological survey was conducted by Montgomery Archaeological Consultants and a copy of the report (MOAC Report No. 05-411) dated October 6<sup>th</sup>, 2005 is attached to the Surface Use Plan.

A Paleo Reconnaissance Survey completed by Intermountain Paleo-Consulting dated October 18, 2005 (IPC#05-115) is attached to the Surface Use Plan.

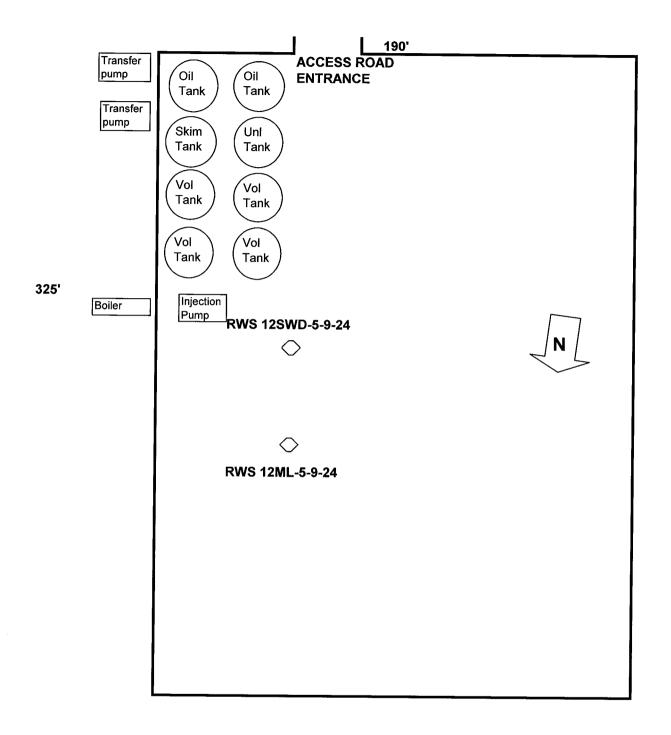


FIGURE # 4
PRODUCTION FACILITY LAYOUT
RWS #12SWD-5-9-24, DISPOSAL WELL
859' FWL, 2033' FSL, NWSW SECTION 5, T9S, R24E
FEDERAL LEASE UTU-73456
Dimensions: 325' X 190'

#### Lessee's or Operator's Representative:

Rick Canterbury

Questar Exploration & Production Company
11002 East 17500 South

Vernal, Utah 84078

(435) 781-4362

#### Certification:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees.

Questar Exploration & Production Company will be fully responsible for the actions of their subcontractors.

A complete copy of the approved Application for Permit to Drill will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Ouestar Exploration and Production Company are responsible for the operations conducted under this application.

These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

| Rich Contamuy   | August 22nd, 2008 |
|-----------------|-------------------|
| Rick Canterbury | Date              |

ONSHORE OIL & GAS RDER NO. 1 Questar Exploration & Production RWS 12SWD-5-9-24

#### DRILLING PROGRAM

# ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal Oil and Gas Leases

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The estimated tops of important geologic markers are as follows:

| <u>Formation</u> | Depth, TVD |
|------------------|------------|
| Uinta            | Surface    |
| Green River      | 1,560°     |
| Casing Point     | 1,760'     |
| Bird's Nest      | 1,780'     |
| TD               | 1,900'     |

# 2. Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones

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# 3. Operator's Specification for Pressure Control Equipment:

It is proposed to drill the surface hole with air or air/mist and no standardized pressure control equipment will be in place. A diverter system in will be in place instead.

## 4. <u>Casing Program</u>

| Hole<br>Size | Csg.<br>Size | Top<br>(MD) | Bottom (MD) | Wt.   | Grade   | Thread | Cond. |
|--------------|--------------|-------------|-------------|-------|---------|--------|-------|
| 20"          | 14"          | sfc         | 40'         | Steel | Cond.   | None   | Used  |
| 12-1/4"      | 9-5/8"       | sfc         | 1,760'      | 47.0  | HCP-110 | LTC    | New   |

| Casing Strengths: |          |         |     | Collapse  | Burst     | Tensile<br>(minimum) |
|-------------------|----------|---------|-----|-----------|-----------|----------------------|
| 9-5/8"            | 47.0 lb. | HCP-110 | LTC | 7,100 psi | 9,440 psi | 1,213,000 lb.        |

# 5. <u>Cementing Program</u>

#### 14" Conductor:

Cement to surface with construction cement.

# 9-5/8" Surface Casing: sfc – 1,760' (MD)

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# 6. <u>Auxiliary Equipment</u>

- A. Kelly Cock yes
- B. Float at the bit no
- C. Monitoring equipment on the mud system none planned

- D. Full opening safety valve on the rig floor yes
- E. Rotating Head no
- F. Request for Variance

Drilling surface hole with air:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III Requirements, subsection E. Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is 1,760 feet and high pressures are not expected.

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- 4. Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the wellbore compressors located within 50 feet on the opposite side of the wellbore from the blooie line and is equipped with 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
- 5. **Kill Fluid to control well** In lieu of having mud products on location to kill the well for an unanticipated kick, Questar will kill the well with water contained in a 400 bbl tank on site. The 400 bbl water tank will also be storage for surface casing cement water.
- 6. **Deflector on the end of the blooie line** Questar will mount a deflector unit at the end of the blooie line for the purpose of changing the direction and velocity of the air and cuttings flow into the reserve pit. Changing the velocity and direction of the cuttings and air will preserve the pit liner. In the event the deflector washes out due to erosion caused by the sand blasting effect of the cuttings, there will be no problem because the deflector is mounted on the very end of the blooie. A washed out deflector will be easily replaced.
- 7. Flare Pit there will be no need of a flare pit during the surface hole air drilling operation because the blooie line is routed directly to the reserve pit.

G. All other operations and equipment for air/gas drilling shall meet specifications in Onshore Order #2, Section III Requirements, subsection E. Special Drilling Operations and Onshore Order #1.

Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. Maximum anticipated mud weight is 8.5 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

# 7. Testing, logging and coring program

- A. Cores none anticipated
- B. DST none anticipated
- C. Logging GR-SP-Induction-Neutron Density 80' to TD GR Cement bond log surface to 9-5/8" casing shoe
- D. Formation and Completion Interval: Green River/Bird's Nest interval, final determination of completion will be made by analysis of logs.
   Stimulation: Stimulation will be designed for the particular area of interest as encountered.

# 8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated. No  $H_2S$  has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 850 psi. Maximum anticipated bottom hole temperature is  $110^{\circ}$  F.



Questar Exploration and Production Company

11002 East 17500 South Vernal, UT 84078 Tel 435 789 4300 Fax 435 781 4329

Via Certified Mail:

Return Receipt Requested

August 22nd, 2008

Mr Chuck Tinsley, 8P-W-GW US EPA, Region VIII 1595 Wynkoop Street Denver, Colorado 80202-1129

> Re: RWS 12SWD-5-9-24 **Underground Injection Control Permit** Class II Type D

Dear Mr. Tinsley:

Enclosed is an Underground injection Control Permit Application (including all the attachments) to construct the subject well as Class II Type D produced fluid disposal well.

Our goal is to have this well operational as soon as possible.

Please contact me at 435-781-4362 with questions.

Tele Canterbruy Rick Canterbury **Regulatory Affairs** 

#### **Enclosures**

UIC Permit Application (EPA form 7520-6) Outlined Requirements for Form 7520-6 Attachment B - Area of Review

Attachment C - Corrective Action Plan and AOR Data Attachment H-2 - Unit Wide Fracture Determination

Attachment H-4 - Water Analysis Attachment M-1 - Drilling Plan

Attachment M-2 - Survey Plat of the location

Attachment Q - EPA Form 7520-14 Plugging and Abandonment Plan with a diagram

Attachment R - Necessary Resources

CC: Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 P. O. Box 145801

Salt Lake City, Utah 84114-5801

Attn: Brad Hill

U.S. Department of Interior **Bureau of Land Management** Vernal Field Office 170 South 500 East Vernal, Utah 84078

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DIV. OF OIL, GAS & MINING

OMB No. 2040-0042

Approval Expires 4/30/07

United States Environmental Protection Agency

# Underground Injection Control Permit Application

| I. | EPA ID Number  |     |     |
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|                      | r <b>Name</b><br>estar Ex | plorati     | on and I             | Production               | on Con                                     | npany                       |           |                                    |          | - : : : : | er Name<br>iestar Explo                            | oration   | and Produ                                       | ction Co   | mpany                          |           |                        |   |
|                      | <b>Addres:</b> 02 E. 17   |             |                      |                          |  |                             | 1         | one Numb<br>35) 781-4              |          |           | t Address<br>002 E. 175                            | 00 S.     |   |            |                                | 1         | ne Number<br>5) 781-43 |   |
| City<br>VEI          | RNAL                      | 4           |                      |                          |  | State<br>UT                 | 100       | <b>CODE</b><br>078                 |          | City<br>V | ERNAL  |           |   |            | State<br>UT                    |           | <b>CODE</b><br>078     |   |
| 1                    | V. Comn                   | nercial     | Facility             |                          | V  | . Ownersi                   | nip       |                                    | VI       | . Leg     | al Contact   |           |   | Ŋ          | VII. SIC Cod                   | <b>es</b> |                        |   |
| K                    | Yes<br>No                 |             |                      |                          | F  | Private<br>Federal<br>Other |           |                                    | ×        | Own       | rator  |           | 1311  |            |                                |           |                        |   |
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## **Well Class and Type Codes**

Class | Wells used to inject waste below the deepest underground source of drinking

water.

Type "I" Nonhazardous industrial disposal well

"M" Nonhazardous municipal disposal well

**"W"** Hazardous waste disposal well injecting below USDWs "X" Other Class I wells (not included in Type "I," M," or "W")

Class II Oil and gas production and storage related injection wells.

Type "D" Produced fluid disposal well

"R" Enhanced recovery well

"H" Hydrocarbon storage well (excluding natural gas)

"X" Other Class II wells (not included in Type "D," "R," or "H")

Class III Special process injection wells.

Type "G" Solution mining well

"S" Sulfur mining well by Frasch process

"U" Uranium mining well (excluding solution mining of conventional mines)

"X" Other Class III wells (not included in Type "G," "S," or "U")

Other Classes Wells not included in classes above.

Class V wells which may be permitted under §144.12. Wells not currently classified as Class I, II, III, or V.

#### **Attachments to Permit Application**

#### Class Attachments

I new well A, B, C, D, F, H – S, U existing A, B, C, D, F, H – U

II new well
A, B, C, E, G, H, M, Q, R; optional – I, J, K, O, P, U
existing
A, E, G, H, M, Q, R, – U; optional – J, K, O, P, Q

III new well A, B, C, D, F, H, I, J, K, M – S, U existing A, B, C, D, F, H, J, K, M – U

Other Classes To be specified by the permitting authority

# INSTRUCTIONS - Underground Injection Control (UIC) Permit Application

Paperwork Reduction Act: The public reporting and record keeping burden for this collection of information is estimated to average 394 hours for a Class I hazardous well application, 252 hours for a Class I non-hazardous well application, 32 hours for a Class III well application. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

This form must be completed by all owners or operators of Class I, II, and III injection wells and others who may be directed to apply for permit by the Director.

- I. EPA I.D. NUMBER Fill in your EPA Identification Number. If you do not have a number, leave blank.
- II. OWNER NAME AND ADDRESS Name of well, well field or company and address.
- III. OPERATOR NAME AND ADDRESS Name and address of operator of well or well field.
- IV. COMMERCIAL FACILITY Mark the appropriate box to indicate the type of facility.
- V. OWNERSHIP Mark the appropriate box to indicate the type of ownership.
- VI. LEGAL CONTACT Mark the appropriate box.
- VII. SIC CODES List at least one and no more than four Standard Industrial Classification (SIC) Codes that best describe the nature of the business in order of priority.
- VIII. WELL STATUS Mark Box A if the well(s) were operating as injection wells on the effective date of the UIC Program for the State. Mark Box B if wells(s) existed on the effective date of the UIC Program for the State but were not utilized for injection. Box C should be marked if the application is for an underground injection project not constructed or not completed by the effective date of the UIC Program for the State.
- IX. TYPE OF PERMIT Mark "Individual" or "Area" to indicate the type of permit desired. Note that area permits are at the discretion of the Director and that wells covered by an area permit must be at one site, under the control of one person and do not inject hazardous waste. If an area permit is requested the number of wells to be included in the permit must be specified and the wells described and identified by location. If the area has a commonly used name, such as the "Jay Field," submit the name in the space provided. In the case of a project or field which crosses State lines, it may be possible to consider an area permit if EPA has jurisdiction in both States. Each such case will be considered individually, if the owner/operator elects to seek an area permit.
- X. CLASS AND TYPE OF WELL Enter in these two positions the Class and type of injection well for which a permit is requested. Use the most pertinent code selected from the list on the reverse side of the application. When selecting type X please explain in the space provided.
- XI. LOCATION OF WELL Enter the latitude and longitude of the existing or proposed well expressed in degrees, minutes, and seconds or the location by township, and range, and section, as required by 40 CFR Part 146. If an area permit is being requested, give the latitude and longitude of the approximate center of the area.
- XII. INDIAN LANDS Place an "X" in the box if any part of the facility is located on Indian lands.
- XIII. ATTACHMENTS Note that information requirements vary depending on the injection well class and status. Attachments for Class I, II, III are described on pages 4 and 5 of this document and listed by Class on page 2. Place EPA ID number in the upper right hand corner of each page of the Attachments.
- XIV. CERTIFICATION All permit applications (except Class II) must be signed by a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, and by a principal executive or ranking elected official for a public agency. For Class II, the person described above should sign, or a representative duly authorized in writing.

EPA Form 7520-6 Page 3 of 6

#### **INSTRUCTIONS - Attachments**

Attachments to be submitted with permit application for Class I, II, III and other wells.

- A. AREA OF REVIEW METHODS Give the methods and, if appropriate, the calculations used to determine the size of the area of review (fixed radius or equation). The area of review shall be a fixed radius of 1/4 mile from the well bore unless the use of an equation is approved in advance by the Director.
- B. MAPS OF WELL/AREA AND AREA OF REVIEW Submit a topographic map, extending one mile beyond the property boundaries, showing the injection well(s) or project area for which a permit is sought and the applicable area of review. The map must show all intake and discharge structures and all hazardous waste treatment, storage, or disposal facilities. If the application is for an area permit, the map should show the distribution manifold (ifapplicable) applying injection fluid to all wells in the area, including all system monitoring points. Within the area of review, the map must show the following:

#### Class I

The number, or name, and location of all producing wells, injection wells, abandoned wells, dry holes, surface bodies of water, springs, mines (surface and subsurface), quarries, and other pertinent surface features, including residences and roads, and faults, if known or suspected. In addition, the map must identify those wells, springs, other surface water bodies, and drinking water wells located within one quarter mile of the facility property boundary. Only information of public record is required to be included in this map;

#### Class II

In addition to requirements for Class I, include pertinent information known to the applicant. This requirement does not apply to existing Class II wells;

#### Class III

In addition to requirements for Class I, include public water systems and pertinent information known to the applicant.

C. CORRECTIVE ACTION PLAN AND WELL DATA - Submit a tabulation of data reasonably available from public records or otherwise known to the applicant on all wells within the area of review, including those on the map required in B, which penetrate the proposed injection zone. Such data shall include the following:

#### Class I

Adescription of each well's types, construction, date drilled, location, depth, record of plugging and/or completion, and any additional information the Director may require. In the case of new injection wells, include the corrective action proposed to be taken by the applicant under 40 CFR 144.55.

#### Class II

In addition to requirement for Class I, in the case of Class II wells operating over the fracture pressure of the injection formation, all known wells within the area of review which penetrate formations affected by the increase in pressure. This requirement does not apply to existing Class II wells.

#### Class III

In addition to requirements for Class I, the corrective action proposed under 40 CFR 144.55 for all Class III wells.

D. MAPS AND CROSS SECTION OF USDWs - Submit maps and cross sections indicating the vertical limits of all underground sources of drinking water within the area of review (both vertical and lateral limits for Class I), their position relative to the injection formation and the direction of water movement, where known, in every underground source of drinking water which may be affected by the proposed injection. (Does not apply to Class II wells.)

EPA Form 7520-6 Page 4 of 6

- E. NAME AND DEPTH OF USDWs (CLASS II) For Class II wells, submit georogic name, and depth to bottom of all underground sources of drinking water which may be affected by the injection.
- F. MAPS AND CROSS SECTIONS OF GEOLOGIC STRUCTURE OF AREA Submit maps and cross sections detailing the geologic structure of the local area (including the lithology of injection and confining intervals) and generalized maps and cross sections illustrating the regional geologic setting. (Does not apply to Class II wells.)
- GEOLOGICAL DATA ON INJECTION AND CONFINING ZONES (Class II) For Class II wells, submit appropriate geological data on the injection zone and confining zones including lithologic description, geological name, thickness, depth and fracture pressure.
- H. OPERATING DATA Submit the following proposed operating data for each well (including all those to be covered by area permits): (1) average and maximum daily rate and volume of the fluids to be injected; (2) average and maximum injection pressure; (3) nature of annulus fluid; (4) for Class I wells, source and analysis of the chemical, physical, radiological and biological characteristics, including density and corrosiveness, of injection fluids; (5) for Class II wells, source and analysis of the physical and chemical characteristics of the injection fluid; (6) for Class III wells, a qualitative analysis and ranges in concentrations of all constituents of injected fluids. If the information is proprietary, maximum concentrations only may be submitted, but all records must be retained.
- FORMATION TESTING PROGRAM Describe the proposed formation testing program. For Class I wells the program must be designed to obtain data on fluid pressure, temperature, fracture pressure, other physical, chemical, and radiological characteristics of the injection matrix and physical and chemical characteristics of the formation fluids.

For Class II wells the testing program must be designed to obtain data on fluid pressure, estimated fracture pressure, physical and chemical characteristics of the injection zone. (Does not apply to existing Class II wells or projects.)

For Class III wells the testing must be designed to obtain data on fluid pressure, fracture pressure, and physical and chemical characteristics of the formation fluids if the formation is naturally water bearing. Only fracture pressure is required if the program formation is not water bearing. (Does not apply to existing Class III wells or projects.)

- J. STIMULATION PROGRAM Outline any proposed stimulation program.
- K. INJECTION PROCEDURES Describe the proposed injection procedures including pump, surge, tank, etc.
- L. CONSTRUCTION PROCEDURES Discuss the construction procedures (according to §146.12 for Class I, §146.22 for Class II, and §146.32 for Class III) to be utilized. This should include details of the casing and cementing program, logging procedures, deviation checks, and the drilling, testing and coring program, and proposed annulus fluid. (Request and submission of justifying data must be made to use an alternative to packer for Class I.)
- M. CONSTRUCTION DETAILS Submit schematic or other appropriate drawings of the surface and subsurface construction details of the well.
- N. CHANGES IN INJECTED FLUID Discuss expected changes in pressure, native fluid displacement, and direction of movement of injection fluid. (Class III wells only.)
- O. PLANS FOR WELL FAILURES Outline contingency plans (proposed plans, if any, for Class II) to cope with all shut-ins or wells failures, so as to prevent migration of fluids into any USDW.
- P. MONITORING PROGRAM Discuss the planned monitoring program. This should be thorough, including maps showing the number and location of monitoring wells as appropriate and discussion of monitoring devices, sampling frequency, and parameters measured. If a manifold monitoring program is utilized, pursuant to §146.23(b)(5), describe the program and compare it to individual well monitoring.
- Q. PLUGGING AND ABANDONMENT PLAN Submit a plan for plugging and abandonment of the well including: (1) describe the type, number, and placement (including the elevation of the top and bottom) of plugs to be used; (2) describe the type, grade, and quantity of cement to be used; and (3) describe the method to be used to place plugs, including the method used to place the well in a state of static equilibrium prior to placement of the plugs. Also for a Class III well that underlies or is in an exempted aquifer, demonstrate adequate protection of USDWs. Submit this information on EPA Form 7520-14, Plugging and Abandonment Plan.

EPA Form 7520-6 Page 5 of 6

- R. NECESSARY RESOURCES Submit evidence such as a surety bond or financial statement to verify that the resources necessary to close, plug or abandon the well are available.
- S. AQUIFER EXEMPTIONS If an aquifer exemption is requested, submit data necessary to demonstrate that the aquifer meets the following criteria: (1) does not serve as a source of drinking water; (2) cannot now and will not in the future serve as a source of drinking water; and (3) the TDS content of the ground water is more than 3,000 and less than 10,000 mg/l and is not reasonably expected to supply a public water system. Data to demonstrate that the aquifer is expected to be mineral or hydrocarbon production, such as general description of the mining zone, analysis of the amenability of the mining zone to the proposed method, and time table for proposed development must also be included. For additional information on aquifer exemptions, see 40 CFR Sections 144.7 and 146.04.
- T. **EXISTING EPA PERMITS** List program and permit number of any existing EPA permits, for example, NPDES, PSD, RCRA, etc.
- U. DESCRIPTION OF BUSINESS Give a brief description of the nature of the business.

EPA Form 7520-6 Page 6 of 6

# RWS 12SWD 5 9 24 2033 FSL, 859 FWL Section 5, T9S, R24E, SLBM Uintah County, Utah

# Attachments to EPA Form 7520-6 (UIC Form 4)

Questar Exploration and Production is applying to drill/construct the RWS 12SWD-5-9-24 as a salt water disposal well. All information regarding the RWS 12SWD-5-9-24 such as engineering reports, maps, well tests and logs will be submitted to the State of Utah Division of Oil, Gas and Mining, the Bureau of Land Management and the Environmental Protection Agency.

# A. Area of Review (AOR) Methods

The AOR will be ¼ mile radius surrounding the subject well.

# B. Maps of AOR (See Attachment B)

Attached is a topographic map indicating the proposed disposal well and other wells in AOR.

#### C. Corrective Action Plan and AOR Well Data (See Attachment C)

Attached is a tabulation of all wells within the AOR. Completion and/or plugging data for each well in the AOR is attached. There are no wells in the AOR operating over the fracture pressure of the injection formation.

## D. Maps and Cross Section of USDWs

Not applicable

#### E. Name and Depth of USDWs (Class II)

Using well control and subsurface water samples available in 1987, the base of the moderately saline water (TDS 10,000 mg/l) for the area, including this AOR, was estimated in USGS Open File Report 87-394/Utah Department of Natural Resources Technical Publication No 92: Base of the Moderately Saline Ground Water in the Uintah Basin (1987: Howell, L., Longson, M.S., and Hunt, G.L). From this publication with its corresponding plates, the base of moderately saline water was estimated to be approximately 3000 feet above sea level at the location of this AOR. With a surface elevation of 5127 feet, the base of the moderately saline water from that report is approximately 2127 feet below surface level. However, gas wells drilled in and adjacent to this AOR since the time of publication of that report have encountered "trona water" at shallower depths, indicating the base of moderately saline water is higher than 2127'. This proposed well will sample and analyze any waters encountered down to and including the proposed injection zone to document subsurface water quality and insure that any USDWs are identified and adequately protected.

#### F. Maps and Cross sections of Geologic structure of the area

Not Applicable

#### G. Geologic Data on Injection and Confining Zones

The target injection interval, the Birds Nest zone, is between 1800' to 1900'. It consists of sandstone interbedded with shales, siltstone, and tight carbonates with large cavities of dissolved trona or nacholite.

Injection perforations are to be determined.

Geologic data is from the QEP gas well, RWS 12ML-5-9-24.

The confining zone directly above the injection zone extends from 1560 to 1800' in the Green River formation. It consists of shale with interbedded tight mudstones and carbonates. An additional 160 feet of confining strata lies above the top of the Green River formation at 1560' extending upward to 1400' into the overlying Uinta formation. USDW's in the Uinta formation are protected by cement and confining zones above the injection zone.

The primary injection target is the Birds Nest zone which does not meet USDW standards, having been analyzed locally (but outside the AOR) to contain 41,000 mg/l Na+ with TDS of 105,000 mg/l (http: pubs.usgs.gov/of/1996/ofr-96-0729.pdf).

#### **Formation Tops:**

Uinta: surface

Green River: 1,560'

Birds Nest zone: 1,800' - 1,900'

# H. Operating Data

1) Anticipated maximum daily injection volume.

At this time QEP is requesting to waive the maximum daily volume requirement.

# 2) Average and Maximum Injection Pressure

The estimated injection pressure gradient is based upon existing UIC permitted surface injection pressures within the Glenn Bench Unit (0.709). Please refer to EPA document reference number 8P-W-GW Unit Wide Fracture Determination in the Glen Bench Enhanced Recovery Unit, Uintah Basin, Utah (see attachment H-2).

The specific gravity for the injection fluid is based on the water analysis performed on two other disposal wells that inject similar fluid.

RW 43-28A (EPA No. UT2918-02445) = 1.02 Specific gravity

RW 41-33B (EPA No. UT2661-02444) = 1.02 Specific gravity

Average = 1.02 Specific gravity

Theoretical maximum allowable surface injection pressure (Pm) is 507 psig.

Pm = maximum pressure at the wellhead

1.02 = specific gravity of the injection fluid

0.709 =face fracture gradient

1800' = depth to top of the perforations

0.433 = normal pressure gradient

Pm = [0.709 - 0.433 (1.02)] 1800 = 507 psi

## 3) Nature of the annulus fluid

The nature of the annulus fluid is described as packer fluid: a mixture of fresh water with scale and corrosion inhibitors.

## 4) Source and Analysis of the Injection Fluid

The injection source will be produced water from producing oil and gas wells. A water analysis for the produced water injecting into two other disposal wells is attached (See attachment H-4). This report must always be submitted in its entirety. Please refer to page 11 and 4 of the report. The injection fluid will be the same for this proposed disposal well.

# I. Formation Testing Program-

Not Applicable

#### J. Stimulation Program-

Not Applicable

# K. Injection Procedures-

Not Applicable

#### L. Construction Procedures-

The eight point drilling program is attached (See attached M-1).

#### M. Construction Details-

Eight point drilling program is attached (See attached M-1).

The well will have an open hole completion from 1760' to 1900'.

The target injection zone is the interval between 1,800'-1900'. It consists of sandstone interbedded with shales, siltstone, and tight carbonates with large cavities of dissolved trona or nacholite.

Survey plat of the location is attached (see attachment M-2).

#### N. Changes in Injected Fluid

Not Applicable

#### O. Plans for Well Failures

Not Applicable

# P. Monitoring Program

Not Applicable

# Q. Plugging and Abandonment Plan

QEP will notify the Director 45 days before conversion or moving on to abandon the well. The Plugging and Abandonment Plan shall be as follows:

- 1. MIRU plugging unit and 2000' 2 7/8" work string.
- 2. RIH with tubing to 2000', Fill hole with minimum 9 ppg fluid.
- 3. Set balanced cement plug from 1460' to 1860'.
- 4. Displace cement to EOT, pull up 6 stands and reverse circulate to clear tubing.
- 5. WOC and then tag plug.
- 6. POOH to 200' and lay down tubing.
- 7. Set cement plug from 200' to surface.
- 8. POOH and lay down tubing.
- 9. RDMO cut off wellhead install dryhole marker.

## R. Necessary Resources

QEP would operate this well under EPA UIC Bond Number 965003769. (See attachment R)

#### S. Aquifer Exemptions

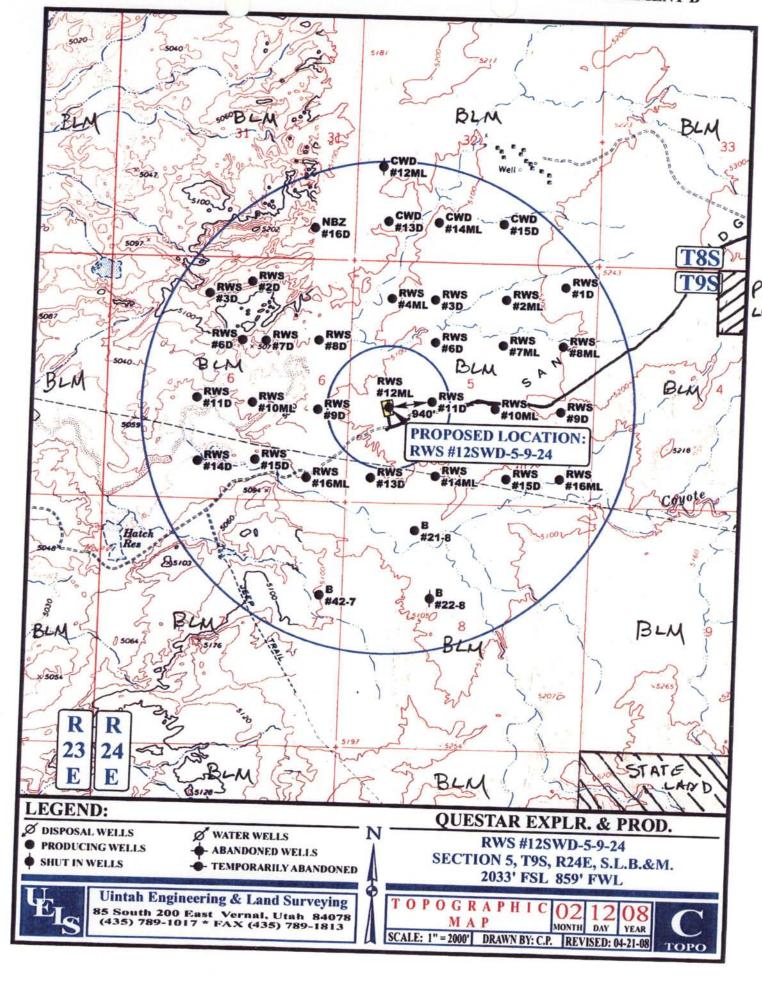
Through an agreement between the State Of Utah and EPA, the Green River Formation has been previously exempted.

# T. Existing EPA Permits

Not Applicable

# U. Description of Business

QEP engages in exploration, drilling and production of crude oil and natural gas in the Rocky Mountain West and the Mid-Continent Regions.



## Attachment C

# Attachment C: Corrective Action Plan and AOR Well Data AOR Wells within ¼ mile Radius of RWS 12SWD-5-9-24

|                 |            | Completion           |            |         |            |                 |             |  |
|-----------------|------------|----------------------|------------|---------|------------|-----------------|-------------|--|
| Well Name & No. | Status     | Location             | API#       | Date    | Top Perf   | <b>Btm Perf</b> | <b>PBTD</b> |  |
|                 |            |                      |            |         |            |                 |             |  |
|                 |            | (2056' FSL 851' FWL) |            |         |            |                 |             |  |
| RWS 12ML-5-9-24 | <b>PGW</b> | NWSW S 5, T9S,R24E.  | 4304737309 | 8/25/06 | 4444-4452' | 7552-7554'      | 8063        |  |

ATTACHMENT H-2



# UNIT LD STATES ENVIRONMENTAL PR

REGION 8
999 18<sup>TH</sup> STREET - SUITE 300
DENVER, CO 80202-2466
http://www.epa.gov/region08

APR 23 2002

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Scott M. Webb Regulatory Coordinator Shenandoah Energy Inc. 475 Seventeenth Street Denver, CO 80202

RE: UNDERGROUND INJECTION CONTROL (UIC)
Shenandoah Energy Inc. Request for
AUDIT: Wide Fracture Determination in
the Clen Bench Enhanced Recovery
Unit; Uinta Basin, Utah

Dear Mr. Webb:

Thank you for providing additional information that supports your request of March 14, 2002, that the Environmental Protection Agency (EPA) consider using a standard Unit-wide fracture gradient (FG) for determining the maximum allowable surface injection pressure (MAIP) for EPA regulated injection wells in the Glen Bench Enhanced Recovery Unit, Uinta Basin, Utah.

Shenandoah Energy Inc. (Shenandoah) originally made this request in a letter dated August 19, 2001. The EPA denied that request stating that Step-Rate Test (SRT) data supplied at that time, from all five existing injection wells in the Glen Bench Unit, demonstrated too wide of a spread in values to consider standardizing the fracture gradient across the Unit. Shenandoah noted that several of the SRT data sets were several years old; had been acquired soon after injection commenced into a depleted zone; and probably were not representative of the actual present reservoir conditions. Subsequently, Shenandoah ran new SRTs on two (2) wells to provide updated injection zone data to determine current reservoir conditions after several years of injection.

EPA has reviewed the new data, and based upon that review the EPA has determined that a Unit-wide fracture gradient could reasonably be used by the Director to determine the MAIP for EPA regulated injection wells in the Glen Bench Enhanced Recovery Unit. According to EPA analysis, a fracture gradient of 0.709. OSI/It may be considered a reasonable average Unit-wide fracture gradient that could be used by the Director to determine a MAIP that will assure that the pressure during injection does not initiate new fractures or propagate existing fractures in the

confining zone adjacent to underground sources of drinking water, pursuant to 40 CFR § 146.23(a)(1).

Accordingly, a new MAIP has been determined for the five (5) regulated injection wells in the Glen Bench Enhanced Recovery Unit. Each new MAIP has been calculated using a fracture gradient of 0.709 psi/ft, a Specific gravity of 1.012, and the depth to the top perforation for each individual injection well. A Minor Permit Modification has been made to each injection well Permit in order to incorporate the changes discussed herein, and a copy of each Minor Permit Modification is enclosed with this letter.

If you have any questions regarding this decision, you may contact Dan Jackson, of my staff, at 800.227.8917, Ext. 6155.

Kefrigan G. Clough

Assistant Regional Administrator Office of Partnerships and

Regulatory Assistance

encl: Minor Permit Modifications:

Glen Bench Fed. No. 22-20 Permit No. UT20755-04235 Glen Bench State No. 12-16 Permit No. UT20765-04248 Glen Bench State No. 7-16 Permit No. UT20803-04335 Glen Bench Unit No. 15-19-8-22 Permit No. 20806-04338 Glen Bench State No. 6-16 Permit No. UT20878-04539

Addendum to a Statement of Basis

cc w/encl: Mr. D. Floyd Wopsock, Chairman Uintah & Ouray Business Council Ute Indian Tribe

Ms. Elaine Willie, Environmental Director Ute Indian Tribe

Superintendent BIA - Uinta & Ouray Indian Agency

Mr. Gil Hunt Utah Division of Oil, Gas, and Mining

Mr. Nathan Wiser 8ENF-T



Analytical Report

November 05, 2007

Report to:

Ann Petrik

Questar Exploration & Production Company 11002 East 17500 South Vernal, UT 84078

cc: Dennis Paulson

Project ID: ANN-2007 ACZ Project ID: L65815 Bill to:

Ann Petrik

**Questar Exploration & Production Company** 

11002 East 17500 South

Vernal, UT 84078

Ann Petrik:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 22, 2007. This project has been assigned to ACZ's project number, L65815. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 12.0. The enclosed results relate only to the samples received under L65815. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 05, 2007. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.

05/Nov/07

Tony Antalek, Project Manager, has reviewed and approved this report in its entirety.





REPAD.01.06.05.01

L65815: Page 1 of 18

Questar Exploration Production Company

November 05, 2007

Project ID: ANN-2007 ACZ Project ID: L65815

#### Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 10 ground water samples from Questar Exploration & Production Company on October 22, 2007. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L65815. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

#### **Holding Times**

All analyses except those qualified with an ACZ 'H' flag were performed within EPA recommended holding times.

#### Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition the following has been noted with this specific project:

1. Client samples were received at a temperature outside of the acceptable range (See Sample Receipt Form).

REPAD.03.06.05.01 L65815: Page 2 of 18



**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

**WONSITS VALLEY** 

ACZ Sample ID: L65815-01

Date Sampled: 10/17/07 15:00

Date Received: 10/22/07

Sample Matrix: Ground Water

#### Wet Chemistry

| Parameter                          | EPA Method         | Result | Qual | ΧQ | Units    | MDL   | PQL   | Date           | Analyst |
|------------------------------------|--------------------|--------|------|----|----------|-------|-------|----------------|---------|
| Conductivity @25C                  | 120.1 / SM2510B    | 46900  |      |    | umhos/cm | 1     | 10    | 10/25/07 18:35 | aeh     |
| Lab Filtration                     | SM 3030 B          |        |      | *  |          |       |       | 10/22/07 14:50 | ear     |
| pH (lab)                           | 150.1 / SM4500H+ B |        |      |    |          |       |       |                |         |
| pН                                 |                    | 8.2    | Н    |    | units    | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| pH measured at                     |                    | 22.0   |      |    | С        | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| Residue, Filterable<br>(TDS) @180C | 160.1 / SM2540C    | 31400  | Н    | *  | mg/L     | 50    | 100   | 10/29/07 10:21 | ear     |
| Specific Gravity                   | SM 2710F           | 1.020  |      | *  |          | 0.001 | 0.001 | 10/30/07 14:00 | jlf     |



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

**GYPSUM HILLS** 

ACZ Sample ID: L65815-02

Date Sampled:

10/17/07 15:00

Date Received:

10/22/07

Sample Matrix: Ground Water

Wet Chemistry

| wet Orientially                    |                    |        |        |          |       |       |                |         |
|------------------------------------|--------------------|--------|--------|----------|-------|-------|----------------|---------|
| Parameter                          | EPA Method         | Result | Qual ' | XQ Units | MDL   | PQL   | Date           | Analyst |
| Conductivity @25C                  | 120.1 / SM2510B    | 622    | -      | umhos/cm | 1     | 10    | 10/25/07 18:39 | aeh     |
| Lab Filtration                     | SM 3030 B          |        |        | *        |       |       | 10/22/07 14:57 | ear     |
| pH (lab)                           | 150.1 / SM4500H+ B |        |        |          |       |       |                |         |
| pН                                 |                    | 8.1    | Н      | units    | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| pH measured at                     |                    | 22.0   |        | С        | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| Residue, Filterable<br>(TDS) @180C | 160.1 / SM2540C    | 430    |        | mg/L     | 10    | 20    | 10/22/07 15:50 | ear     |
| Specific Gravity                   | SM 2710F           | 0.997  |        | *        | 0.001 | 0.001 | 10/30/07 14:02 | jlf     |



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

**HORSE POOL** 

ACZ Sample ID: L65815-03

Date Sampled: 10/17/07 15:00

Date Received: 10/22/07

Sample Matrix: Ground Water

| wet Chemistry                   |                    |        |      |          |       |       |                |         |
|---------------------------------|--------------------|--------|------|----------|-------|-------|----------------|---------|
| Parameter                       | EPA Method         | Result | Qual | XQ Units | MDL   | PQL   | Date           | Analyst |
| Conductivity @25C               | 120.1 / SM2510B    | 619    |      | umhos/cm | 1     | 10    | 10/25/07 18:43 | aeh     |
| Lab Filtration                  | SM 3030 B          |        |      | *        |       |       | 10/22/07 15:04 | ear     |
| pH (lab)                        | 150.1 / SM4500H+ B |        |      |          |       |       |                |         |
| pН                              |                    | 8.0    | Н    | units    | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| pH measured at                  |                    | 22.0   |      | С        | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| Residue, Filterable (TDS) @180C | 160.1 / SM2540C    | 400    |      | mg/L     | 10    | 20    | 10/22/07 15:52 | ear     |
| Specific Gravity                | SM 2710F           | 0.998  |      | *        | 0.001 | 0.001 | 10/30/07 14:05 | jlf     |



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

**GLEN BENCH INJECTION** 

ACZ Sample ID: L65815-04

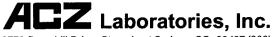
Date Sampled: 10/17/07 15:00

Date Received: 10/22/07

Sample Matrix: Ground Water

Wet Chemistry

| Parameter                       | EPA Method         | Result | Qual | ΧQ | Units    | MDL   | PQL   | Date           | Analyst |
|---------------------------------|--------------------|--------|------|----|----------|-------|-------|----------------|---------|
| Conductivity @25C               | 120.1 / SM2510B    | 13000  |      |    | umhos/cm | 1     | 10    | 10/25/07 18:46 | aeh     |
| Lab Filtration                  | SM 3030 B          |        |      | *  |          |       |       | 10/22/07 15:12 | ear     |
| pH (lab)                        | 150.1 / SM4500H+ B |        |      |    |          |       |       |                |         |
| pН                              |                    | 8.4    | Н    |    | units    | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| pH measured at                  |                    | 23.0   |      |    | С        | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| Residue, Filterable (TDS) @180C | 160.1 / SM2540C    | 7800   |      | *  | mg/L     | 10    | 20    | 10/22/07 15:54 | ear     |
| Specific Gravity                | SM 2710F           | 1.000  |      | *  |          | 0.001 | 0.001 | 10/30/07 14:08 | jlf     |



Inorganic Analytical Results

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

**BRENNON INJECTION** 

ACZ Sample ID: L65815-05

Date Sampled: 10/17/07 15:00

Date Received: 10/22/07

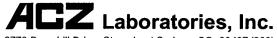
Sample Matrix: Ground Water

Wet Chemistry

| True Orientinou y                  |                    |        |      |    |          |       |       |                |         |
|------------------------------------|--------------------|--------|------|----|----------|-------|-------|----------------|---------|
| Parameter                          | EPA Method         | Result | Qual | XQ | Units    | MDL   | PQL   | Date           | Analyst |
| Conductivity @25C                  | 120.1 / SM2510B    | 35000  |      |    | umhos/cm | 1     | 10    | 10/25/07 18:50 | aeh     |
| Lab Filtration                     | SM 3030 B          |        |      | *  |          |       |       | 10/22/07 15:19 | ear     |
| pH (lab)                           | 150.1 / SM4500H+ B |        |      |    |          |       |       |                |         |
| pН                                 |                    | 8.0    | Н    |    | units    | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| pH measured at                     |                    | 22.0   |      |    | С        | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| Residue, Filterable<br>(TDS) @180C | 160.1 / SM2540C    | 22700  | Н    | *  | mg/L     | 50    | 100   | 10/29/07 10:23 | ear     |
| Specific Gravity                   | SM 2710F           | 1.020  |      | *  |          | 0.001 | 0.001 | 10/30/07 14:10 | jlf     |

REPIN.02.06.05.01

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Inorganic Analytical Results

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

**CENTRAL BATTERY INJE** 

ACZ Sample ID: L65815-06

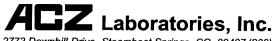
Date Sampled: 10/17/07 15:00

Date Received: 10/22/07

Sample Matrix: Ground Water

#### Wet Chemistry

| Parameter                       | EPA Method         | Result | Qual | ΧQ | Units    | MDL   | PQL   | Date           | Analyst |
|---------------------------------|--------------------|--------|------|----|----------|-------|-------|----------------|---------|
| Conductivity @25C               | 120.1 / SM2510B    | 16300  |      |    | umhos/cm | 1     | 10    | 10/25/07 18:53 | aeh     |
| Lab Filtration                  | SM 3030 B          |        |      | *  |          |       |       | 10/22/07 15:27 | ear     |
| pH (lab)                        | 150.1 / SM4500H+ B |        |      |    |          |       |       |                |         |
| рН                              |                    | 8.4    | Н    |    | units    | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| pH measured at                  |                    | 22.0   |      |    | С        | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| Residue, Filterable (TDS) @180C | 160.1 / SM2540C    | 10700  |      | *  | mg/L     | 10    | 20    | 10/22/07 15:59 | ear     |
| Specific Gravity                | SM 2710F           | 1.010  |      | *  |          | 0.001 | 0.001 | 10/30/07 14:13 | jlf     |



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

### Inorganic Analytical Results

**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

43-28A

ACZ Sample ID: L65815-07

Date Sampled: 10/17/07 15:00

Date Received: 10/22/07

Sample Matrix: Ground Water

Wet Chemistry

| Parameter                       | EPA Method         | Result | Qual | ΧQ | Units    | MDL   | PQL   | Date /         | Analyst |
|---------------------------------|--------------------|--------|------|----|----------|-------|-------|----------------|---------|
| Conductivity @25C               | 120.1 / SM2510B    | 35500  |      |    | umhos/cm | 1     | 10    | 10/25/07 18:54 | aeh     |
| Lab Filtration                  | SM 3030 B          |        |      | *  |          |       |       | 10/22/07 15:34 | ear     |
| pH (lab)                        | 150.1 / SM4500H+ B |        |      |    |          |       |       |                |         |
| pН                              |                    | 6.9    | Н    |    | units    | 0.1   | 0.1   | 10/30/07 0:00  | aeh     |
| pH measured at                  |                    | 22.0   |      |    | С        | 0.1   | 0.1   | 10/30/07 0:00  | aeh     |
| Residue, Filterable (TDS) @180C | 160.1 / SM2540C    | 24500  | Н    | *  | mg/L     | 50    | 100   | 10/29/07 10:25 | ear     |
| Specific Gravity                | SM 2710F           | 1.020  |      | *  |          | 0.001 | 0.001 | 10/30/07 14:16 | jlf     |

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# **4CZ** Laboratories, Inc.

Inorganic Analytical Results

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

41-33B

ACZ Sample ID: L65815-08

Date Sampled:

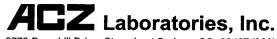
10/17/07 15:00

Date Received: 10/22/07

Sample Matrix: Ground Water

Wet Chemistry

| wet Chemistry                      |                    |        |      |    |          |       |       |                |         |
|------------------------------------|--------------------|--------|------|----|----------|-------|-------|----------------|---------|
| Parameter                          | EPA Method         | Result | Qual | XQ | Units    | MDL   | PQL   | Date           | Analyst |
| Conductivity @25C                  | 120.1 / SM2510B    | 45400  |      |    | umhos/cm | 1     | 10    | 10/25/07 18:59 | aeh     |
| Lab Filtration                     | SM 3030 B          |        |      | *  |          |       |       | 10/22/07 15:42 | ear     |
| pH (lab)                           | 150.1 / SM4500H+ B |        |      |    |          |       |       |                |         |
| рН                                 |                    | 7.5    | Н    |    | units    | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| pH measured at                     |                    | 22.0   |      |    | С        | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| Residue, Filterable<br>(TDS) @180C | 160.1 / SM2540C    | 30300  | Н    | *  | mg/L     | 50    | 100   | 10/29/07 10:27 | ear     |
| Specific Gravity                   | SM 2710F           | 1.020  |      | *  |          | 0.001 | 0.001 | 10/30/07 14:19 | jlf     |



Inorganic Analytical Results

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

**18B INJECTION** 

ACZ Sample ID: L65815-09

Date Sampled:

10/17/07 15:00

Date Received: 10/22/07

Sample Matrix: Ground Water

Wet Chemistry

| Parameter                       | EPA Method         | Result | Qual XQ | Units    | MDL   | PQL   | Date           | Analyst |
|---------------------------------|--------------------|--------|---------|----------|-------|-------|----------------|---------|
| Conductivity @25C               | 120.1 / SM2510B    | 639    |         | umhos/cm | 1     | 10    | 10/25/07 19:03 | aeh     |
| Lab Filtration                  | SM 3030 B          |        | *       |          |       |       | 10/22/07 15:49 | ear     |
| pH (lab)                        | 150.1 / SM4500H+ B |        |         |          |       |       |                |         |
| рН                              |                    | 8.1    | Н       | units    | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| pH measured at                  |                    | 22.0   |         | С        | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| Residue, Filterable (TDS) @180C | 160.1 / SM2540C    | 420    |         | mg/L     | 10    | 20    | 10/22/07 16:05 | ear     |
| Specific Gravity                | SM 2710F           | 1.000  | *       |          | 0.001 | 0.001 | 10/30/07 14:21 | jlf     |



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## Inorganic Analytical Results

**Questar Exploration & Production Company** 

Project ID:

ANN-2007

Sample ID:

21A INJECTION

ACZ Sample ID: L65815-10

Date Sampled: 10/17/07 15:00

Date Received:

10/22/07

Sample Matrix: Ground Water

Wet Chemistry

| Parameter                       | EPA Method         | Result | Qual XC | – Units  | MDL   | PQL   | Date           | Analyst |
|---------------------------------|--------------------|--------|---------|----------|-------|-------|----------------|---------|
| Conductivity @25C               | 120.1 / SM2510B    | 29200  |         | umhos/cm | 1     | 10    | 10/25/07 19:25 | aeh     |
| Lab Filtration                  | SM 3030 B          |        | *       |          |       |       | 10/22/07 15:57 | ear     |
| pH (lab)                        | 150.1 / SM4500H+ B |        |         |          |       |       |                |         |
| рН                              |                    | 8.3    | Н       | units    | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| pH measured at                  |                    | 21.0   |         | С        | 0.1   | 0.1   | 10/25/07 0:00  | aeh     |
| Residue, Filterable (TDS) @180C | 160.1 / SM2540C    | 19600  | *       | mg/L     | 10    | 20    | 10/22/07 16:07 | ear     |
| Specific Gravity                | SM 2710F           | 1.020  | *       |          | 0.001 | 0.001 | 10/30/07 14:24 | jlf     |

L65815: Page 12 of 18

Inorganic Reference

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

|  |  |  | ions |
|--|--|--|------|
|  |  |  |      |
|  |  |  |      |
|  |  |  |      |
|  |  |  |      |

Batch A distinct set of samples analyzed at a specific time

Found Value of the QC Type of interest

Limit Upper limit for RPD, in %.

Lower Recovery Limit, in % (except for LCSS, mg/Kg)

MDL Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.

PCN/SCN A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis

PQL Practical Quantitation Limit, typically 5 times the MDL.

QC True Value of the Control Sample or the amount added to the Spike

Rec Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)

RPD Relative Percent Difference, calculation used for Duplicate QC Types

Upper Upper Recovery Limit, in % (except for LCSS, mg/Kg)

Sample Value of the Sample of interest

| QC Sample Type | es   |       |  |
|----------------|--|-------|--|
| AS             | Analytical Spike (Post Digestion)                      | LCSWD | Laboratory Control Sample - Water Duplicate  |
| ASD            | Analytical Spike (Post Digestion) Duplicate            | LFB   | Laboratory Fortified Blank                   |
| CCB            | Continuing Calibration Blank                           | LFM   | Laboratory Fortified Matrix                  |
| CCV            | Continuing Calivation Verification standard            | LFMD  | Laboratory Fortified Matrix Duplicate        |
| DUP            | Sample Duplicate                                       | LRB   | Laboratory Reagent Blank                     |
| ICB            | Initial Calibration Blank                              | MS    | Matrix Spike                                 |
| ICV            | Initial Calibration Verification standard              | MSD   | Matrix Spike Duplicate                       |
| ICSAB          | Inter-element Correction Standard - A plus B solutions | PBS   | Prep Blank - Soil                            |
| LCSS           | Laboratory Control Sample - Soil                       | PBW   | Prep Blank - Water                           |
| LCSSD          | Laboratory Control Sample - Soil Duplicate             | PQV   | Practical Quantitation Verification standard |
| LCSW           | Laboratory Control Sample - Water                      | SDL   | Serial Dilution                              |

#### QC Sample Type Explanations

Blanks Verifies that there is no or minimal contamination in the prep method or calibration procedure.

Control Samples Verifies the accuracy of the method, including the prep procedure.

Duplicates Verifies the precision of the instrument and/or method.

Spikes/Fortified Matrix Determines sample matrix interferences, if any.

Standard Verifies the validity of the calibration.

#### ACZ Qualifiers (Qual)

B Analyte concentration detected at a value between MDL and PQL.

H Analysis exceeded method hold time. pH is a field test with an immediate hold time.

U Analyte was analyzed for but not detected at the indicated MDL

#### Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples Supplement I, May 1994.
- (5) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (6) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995.

#### Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.

REPIN03.02.07.01

2773 Downhill Drive Steamboat Springs, CO 80487

(800) 334-5493

## Inorganic Extended Qualifier Report

#### **Questar Exploration & Production Company**

ACZ Project ID: L65815

| ACZID     | WORKNUM  | PARAMETER                       | METHOD          | QUAL | DESCRIPTION   |
|-----------|----------|---------------------------------|-----------------|------|---|
| L65815-01 | WG235129 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | H2   | Initial analysis within holding time. Reanalysis for the required dilution was past holding time.   |
|           |          |                                 | 160.1 / SM2540C | HE   | Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions). |
|           |          |                                 | 160.1 / SM2540C | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           |          |                                 | 160.1 / SM2540C | zo   | TDS concentration is based on a final residue greater than 200 mg.  |
| L65815-04 | WG234740 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | ZO   | TDS concentration is based on a final residue greater than 200 mg.  |
| L65815-05 | WG235129 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | H2   | Initial analysis within holding time. Reanalysis for the required dilution was past holding time.   |
|           |          |                                 | 160.1 / SM2540C | HE   | Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions). |
|           |          |                                 | 160.1 / SM2540C | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           |          |                                 | 160.1 / SM2540C | zo   | TDS concentration is based on a final residue greater than 200 mg.  |
| L65815-06 | WG234740 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | ZO   | TDS concentration is based on a final residue greater than 200 mg.  |
| L65815-07 | WG235129 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | H2   | Initial analysis within holding time. Reanalysis for the required dilution was past holding time.   |
|           |          |                                 | 160.1 / SM2540C | HE   | Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions). |
|           |          |                                 | 160.1 / SM2540C | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           |          |                                 | 160.1 / SM2540C | ZO   | TDS concentration is based on a final residue greater than 200 mg.  |
| L65815-08 | WG235129 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | H2   | Initial analysis within holding time. Reanalysis for the required dilution was past holding time.   |
|           |          |                                 | 160.1 / SM2540C | HE   | Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions). |
|           |          |                                 | 160.1 / SM2540C | RA   | Relative Percent Difference (RPD) was not used for data validation because the sample concentration is too low for accurate evaluation (< 10x MDL).   |
|           |          |                                 | 160.1 / SM2540C | ZO   | TDS concentration is based on a final residue greater than 200 mg.  |
| L65815-10 | WG234740 | Residue, Filterable (TDS) @180C | 160.1 / SM2540C | ZO   | TDS concentration is based on a final residue greater than 200 mg.  |

2773 Downhill Drive Steamboat Springs, CO 80487

(800) 334-5493

# Certification Qualifiers

**Questar Exploration & Production Company** 

ACZ Project ID: L65815

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Lab Filtration

SM 3030 B

Specific Gravity

SM 2710F

Sample Receipt

#### **Questar Exploration & Production Company**

ANN-2007

ACZ Project ID:

L65815

Date Received:

10/22/2007

Received By:

Date Printed:

10/22/2007

#### Receipt Verification

- 1) Does this project require special handling procedures such as CLP protocol?
- 2) Are the custody seals on the cooler intact?
- 3) Are the custody seals on the sample containers intact?
- 4) Is there a Chain of Custody or other directive shipping papers present?
- 5) Is the Chain of Custody complete?
- 6) Is the Chain of Custody in agreement with the samples received?
- 7) Is there enough sample for all requested analyses?
- 8) Are all samples within holding times for requested analyses?
- 9) Were all sample containers received intact?
- 10) Are the temperature blanks present?
- 11) Are the trip blanks (VOA and/or Cyanide) present?
- 12) Are samples requiring no headspace, headspace free?
- 13) Do the samples that require a Foreign Soils Permit have one?

| YES | NO | NA |
|-----|----|----|
|     |    | Х  |
|     |    | Х  |
|     |    | Х  |
| Х   | -  |    |
| Х   |    |    |
| Х   |    |    |
| Х   |    |    |
| Х   |    |    |
| Х   |    |    |
|     |    | Х  |
|     |    | Х  |
|     |    | Х  |
|     |    | Х  |
|     |    |    |

#### Exceptions: If you answered no to any of the above questions, please describe

N/A

#### Contact (For any discrepancies, the client must be contacted)

N/A

#### Shipping Containers

| Cooler Id |  |
|-----------|--|
| NA4724    |  |
| NA4722    |  |
| NA4723    |  |
|           |  |

| Temp (°C) | Rad (µR/hr) |
|-----------|-------------|
| 17.1      | 15          |
| 16.4      | 16          |
| 15.9      | 16          |
|           |             |

Client must contact ACZ Project Manager if analysis should not proceed for samples received outside of thermal preservation acceptance criteria.

#### Notes

REPAD.03.11.00.01

L65815: Page 16 of 18

Sample Receipt

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Questar Exploration & Production Company

ANN-2007

ACZ Project ID: Date Received: L65815 10/22/2007

Received By:

#### Sample Container Preservation

| SAMPLE    | CLIENT ID            | R < 2 | G < 2 | BK < 2 | Y< 2 | YG< 2 | B< 2 | 0 < 2 | T >12 | N/A | RAD | ID |
|-----------|----------------------|-------|-------|--------|------|-------|------|-------|-------|-----|-----|----|
| L65815-01 | WONSITS VALLEY       |       |       |        |      |       |      |       |       | Χ   |     | ][ |
| L65815-02 | GYPSUM HILLS         |       |       |        |      |       |      |       |       | Χ   |     |    |
| L65815-03 | HORSE POOL           |       |       |        |      |       |      |       |       | X   |     |    |
| L65815-04 | GLEN BENCH INJECTION |       |       |        |      |       |      |       |       | Х   |     |    |
| L65815-05 | BRENNON INJECTION    |       |       |        |      |       |      |       |       | Х   |     |    |
| L65815-06 | CENTRAL BATTERY INJE |       |       |        |      |       |      |       |       | X   |     | 쁘  |
| L65815-07 | 43-28A               |       |       |        |      |       |      |       |       | Х   |     | 쁘  |
| L65815-08 | 41-33B               |       |       |        |      |       |      |       |       | X   |     | 빋  |
| L65815-09 | 18B INJECTION        |       |       |        |      |       |      |       |       | X   |     | 쁘  |
|           | 21A INJECTION        |       |       |        |      |       |      |       |       | Х   |     |    |

#### Sample Container Preservation Legend

| Abbreviation | Description            | Container Type | Preservative/Limit       |
|--------------|------------------------|----------------|--------------------------|
| R            | Raw/Nitric             | RED            | pH must be < 2           |
| В            | Filtered/Sulfuric      | BLUE           | pH must be < 2           |
| вк           | Filtered/Nitric        | BLACK          | pH must be < 2           |
| G            | Filtered/Nitric        | GREEN          | pH must be < 2           |
| 0            | Raw/Sulfuric           | ORANGE         | pH must be < 2           |
| P            | Raw/NaOH               | PURPLE         | pH must be > 12 *        |
| T            | Raw/NaOH Zinc Acetate  | TAN            | pH must be > 12          |
| Υ            | Raw/Sulfuric           | YELLOW         | pH must be < 2           |
| YG           | Raw/Sulfuric           | YELLOW GLASS   | pH must be < 2           |
| N/A          | No preservative needed | Not applicable |                          |
| RAD          | Gamma/Beta dose rate   | Not applicable | must be < 250 $\mu$ R/hr |

<sup>\*</sup> pH check performed by analyst prior to sample preparation

| Sample IDs Reviewed By: |  |  |
|-------------------------|--|--|
|                         |  |  |

| ACZ Labor   | ratories, Inc.  | L6                   | 58                 | 15                  |            |                       |                  |           | HAIN        |                |            |
|---|---|----------------------|--------------------|---------------------|------------|-----------------------|------------------|-----------|-------------|----------------|------------|
| 2773 Downhilt Drive Steamboat Sp  | orings, CO 80487 (800) 33                                 | 4-5493               |                    |                     |            |                       |                  |           | 010         |                |            |
| Report to:  |   |                      |                    |                     |            |                       |                  |           |             |                |            |
| Name: Ann Petrik  |   | 4                    | Addre              | ss:                 |            | East 17<br>Utah 8     | 500 Sou          | nth       |             |                |            |
| Company: Questar Exploration and  |   | 4                    | <u> </u>           |                     |            |                       |                  | <u> </u>  |             |                |            |
| E-mail: Ann.Petrik@questar.com  | n   |                      | Telep              | hone:               | (435)      | 781-409               | <u> </u>         |           |             |                |            |
| Copy of Report to:  |   |                      |                    |                     |            |                       |                  |           |             |                |            |
| Name: Dennis Paulson  |   | _                    | E-mai              | l:                  | Dennis     | .Paulso               | n@ques           | tar.com   |             |                |            |
| Company: Questar Exploration and  | Production Co.  |                      | Telepi             | hone:               | (435) 7    | 781 <b>-4</b> 35      | 4                |           |             |                |            |
| Invoice to:   |   |                      |                    |                     |            |                       |                  |           |             |                |            |
| Name: same as above   |   |                      | Addre              | <b>\$</b> S:        |            |                       |                  |           |             |                |            |
| Company:  |   | 7                    |                    |                     |            |                       |                  |           |             |                |            |
| E-mail:   |   | 1                    | Telep              | hone:               |            |                       |                  |           |             |                |            |
| if sample(s) received past holdin                                       | g time (HT), or if insufficie                             | int HT re            | mains 1            | o comi              | olete      |                       |                  |           | YES         |                |            |
| analysis before expiration, shall                                       | ACZ proceed with reques                                   | ted short            | HT and             | alyses?             |            |                       |                  |           | NO          |                |            |
| if "NO" then ACZ will contact clie<br>is indicated, ACZ will proceed wi | int for further instruction.<br>In the requested analyses | If neith(<br>aven if | yr "YES<br>HT is e | " nor "i<br>xoired. | and da     | ta will i             | be qual          | ified.    |             |                |            |
| PROJECT INFORMATION   | m me raduation eries) see                                 | ., - : • : • : •     | ANA                | LYSES               | REQUI      | ESTED                 | (attach          | list or   | use que     | ote nun        | iber)      |
| Quote #: Annual Injection   |   |                      |                    |                     |            |                       |                  |           |             |                |            |
| Project/PO #: ann - 2007  |   | 1                    | ys                 |                     |            | ڇِ                    |                  |           |             |                |            |
| Shipping Co.: UPS   |   | 1                    | of Containers      |                     |            | Specific Conductivity |                  |           |             |                |            |
| Tracking #:   |   | 1                    | at C               |                     |            | puo                   | īğ.              |           |             |                |            |
| Reporting state for compliance  | testing: Utah   | 1                    | ŭ                  |                     | ğ          | Ö                     | Specific Gravity | Į         |             |                |            |
| Are any samples NRC licensab  |   | 1                    | **                 |                     | IDS (mg/l) | ecifi                 | ecifi            |           |             |                |            |
| SAMPLE IDENTIFICATION   | DATE:TIME   | Matrix               |                    | 표                   | Ω.         | dS                    | တ္တ              |           |             |                |            |
| Wonsits Valley  | 10/17/2007 15:00  | GW                   | 1                  | 1                   | 1          | >                     | 1                |           |             |                |            |
| Gypsum Hills  | 10/17/2007 15:00  | GW                   | 1                  | 1                   | >          | <b>&gt;</b>           | 1                |           |             |                |            |
| Horse Pool  | 10/17/2007 15:00  | GW                   | 1                  | 1                   | 1          | 1                     | 1                |           |             |                |            |
| Gien Bench injection  | 10/17/2007 15:00  | GW                   | 1                  | 1                   | 1          | 1                     | 1                |           |             |                |            |
| Brennon Injection   | 10/17/2007 15:00  | GW                   | 1                  | 1                   | 1          | <b>\</b>              | 1                |           |             |                |            |
| Central Battery Injection   | 10/17/2007 15:00  | GW                   | 1                  | \<br>\              | <b>\</b>   | `                     | 1                |           |             |                |            |
| 43-28A  | 10/17/2007 15:00  | GW                   | 1                  | <b>*</b>            | >          | >                     | 1                |           |             |                |            |
| 41-33B  | 10/17/2007 15:00  | GW                   | 1                  | <b>*</b>            | >          | >                     | 1                |           |             |                |            |
| 18B Injection   | 10/17/2007 15:00  | GW                   | 1                  | 1                   | <b>\</b>   | 1                     | 1                |           |             |                |            |
| 21A Injection   | 10/17/2007 15:00  | GW                   | 1                  | 1                   | <b>~</b>   | 1                     | 1                |           |             | <u> </u>       |            |
| Matrix SW (Surface Water) · GW  | (Ground Water) · WW (Waste )                              | (Vater) · D          | W (Drinki          | ng Wate             | r) - SL (S | ludge) ·              | SO (Soil         | ) · OL (O | ii) - Other | r (Specify     | <b>(</b> ) |
| REMARKS   |   |                      |                    |                     |            |                       |                  |           |             |                |            |
|   |   |                      |                    |                     |            |                       |                  |           |             |                |            |
| DELINQUEUED DV  | DATE:T  | IME                  |                    | REC                 | EIVED      | BY:                   |                  | D/        | ATE:TI      | ME             | Page       |
| RELINQUISHED BY   |   |                      |                    | V                   | 1          |                       |                  |           | 120         |                |            |
| Dennis Paulson Dem J. Va  | WENT 1010/2007 11:0                                       | ~ NN                 |                    |                     | _ليد       |                       |                  | 10.6      |             | <del>-  </del> | 2,         |
|   |   |                      |                    |                     | a*         |                       |                  |           |             |                |            |
| FRMQA021.12.03.06   | l   |                      | Whit               | e - Retu            | m with     | samola                | Ye               | llow - R  | etein fo    | r vour a       | cords      |

FRMQA021.12.03.06

# QUESTAR EXPLR. & PROD.

RWS #12SWD-5-9-24

LOCATED IN UINTAH COUNTY, UTAH SECTION 5, T9S, R24E, S.L.B.&M.

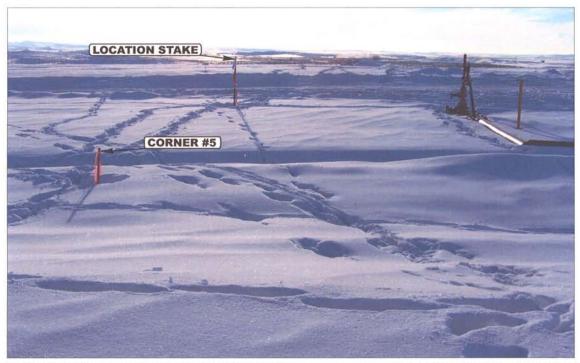


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: NORTHERLY



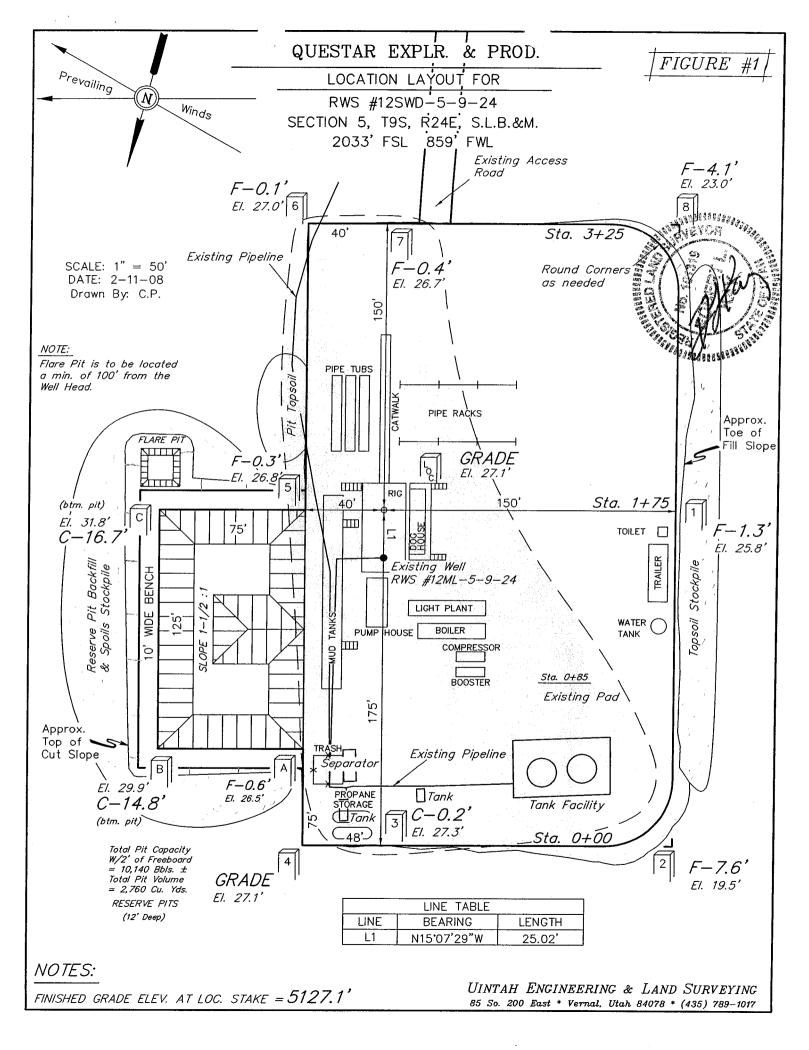
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

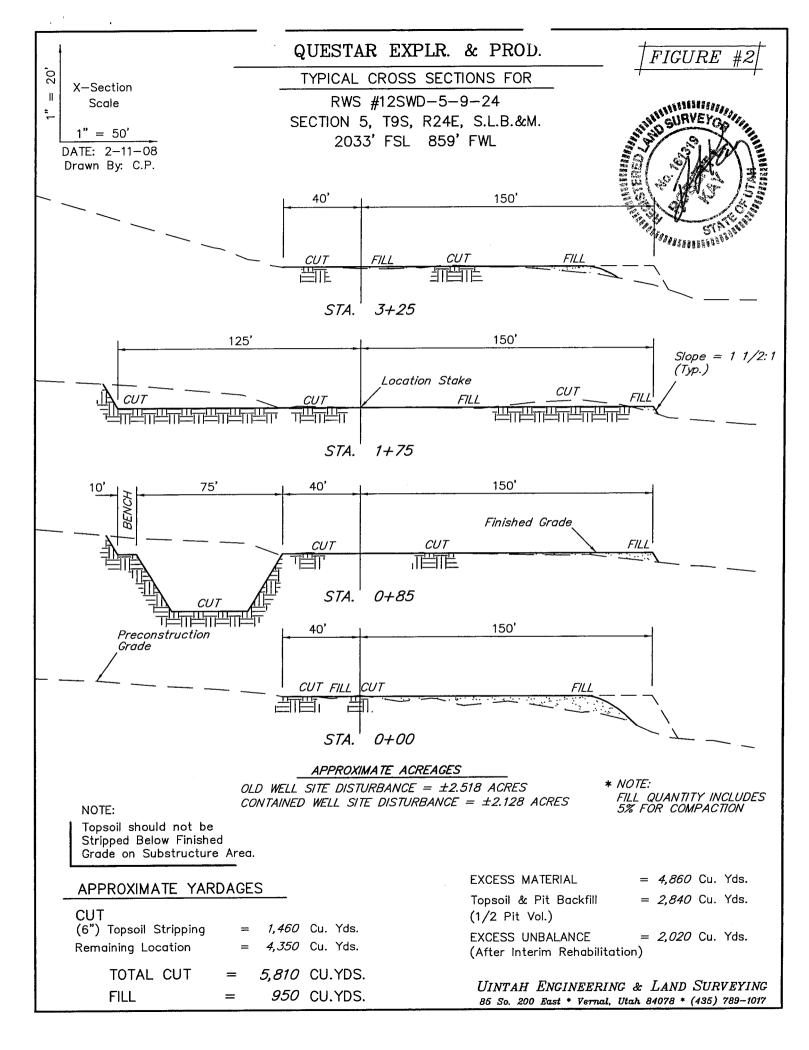
LOCATION PHOTOS

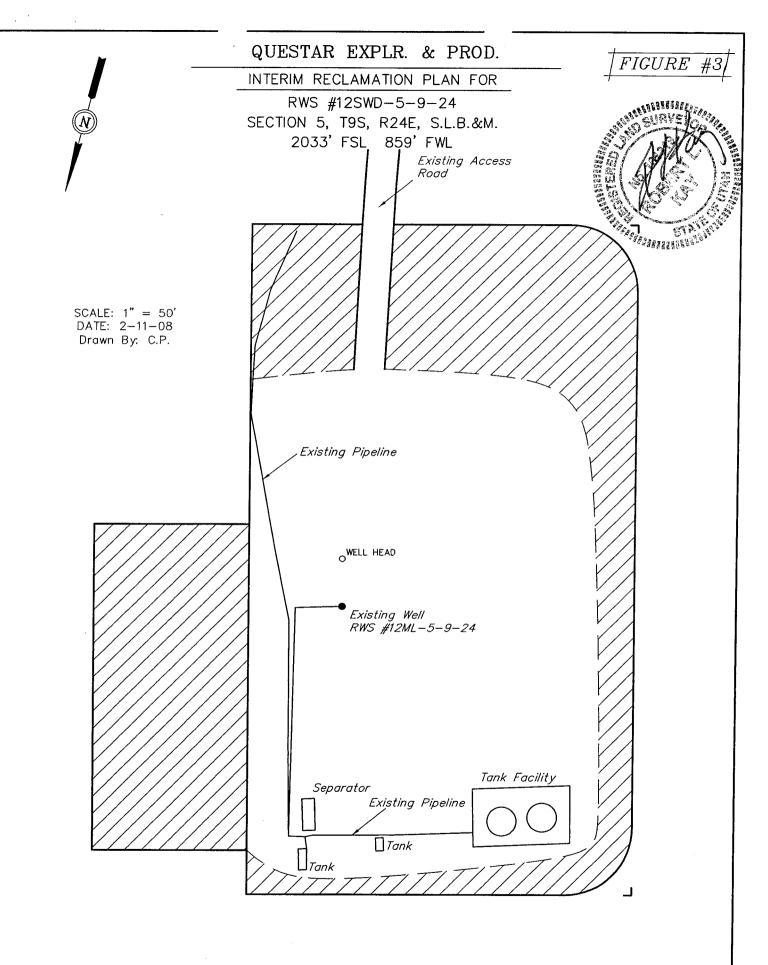
MONTH

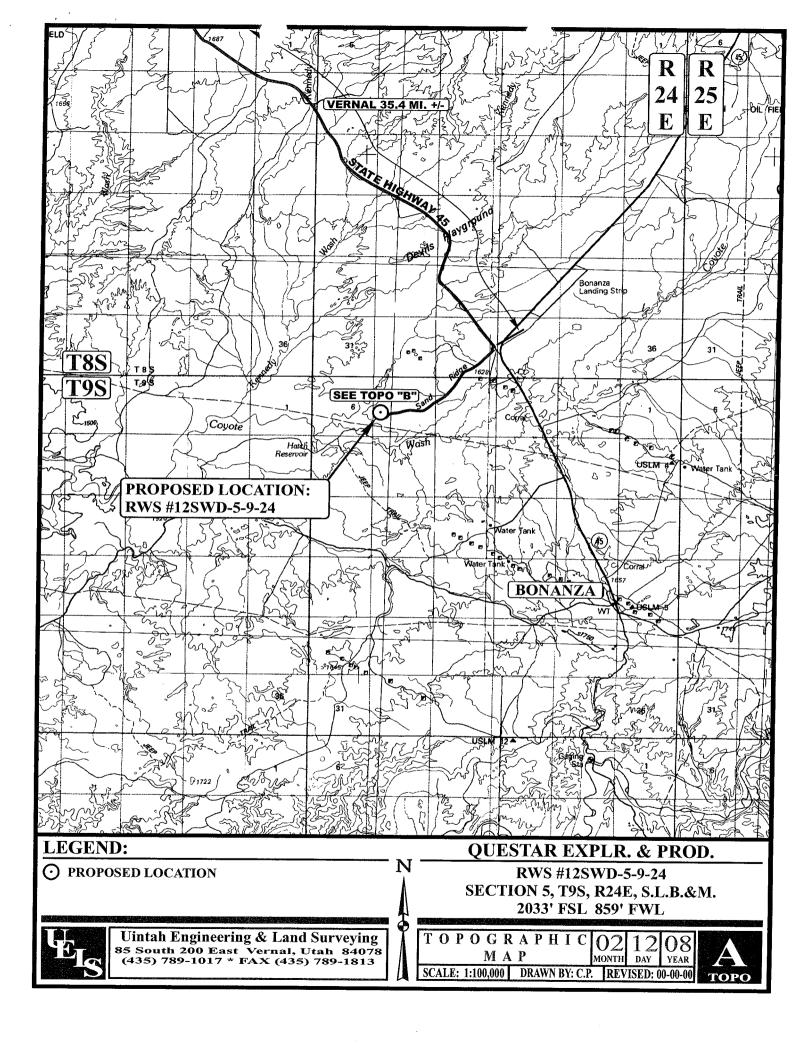
РНОТО

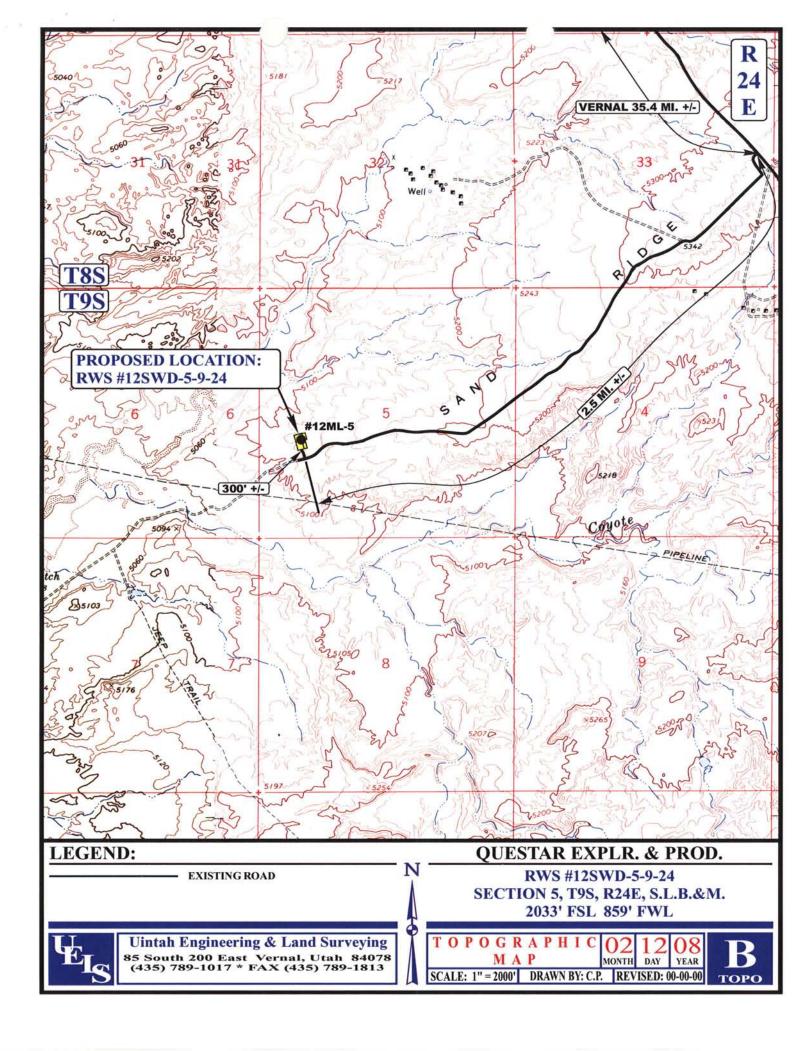
TAKEN BY: D.R. DRAWN BY: C.P. REVISED: 00-00-00

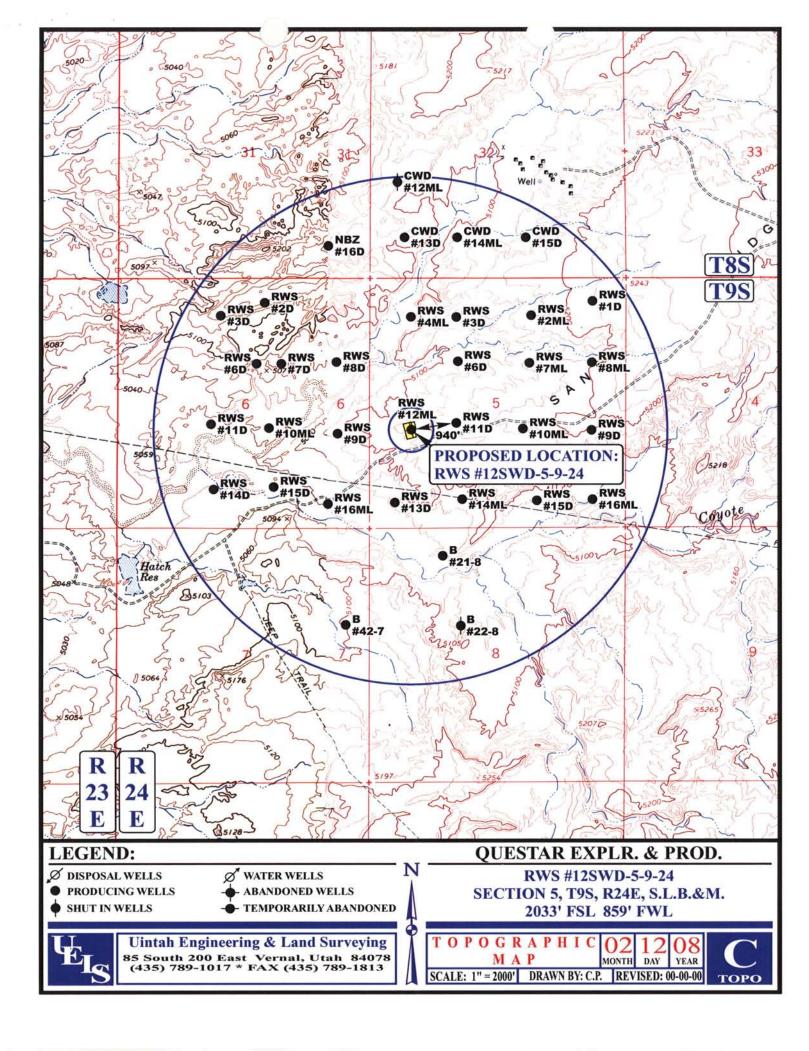


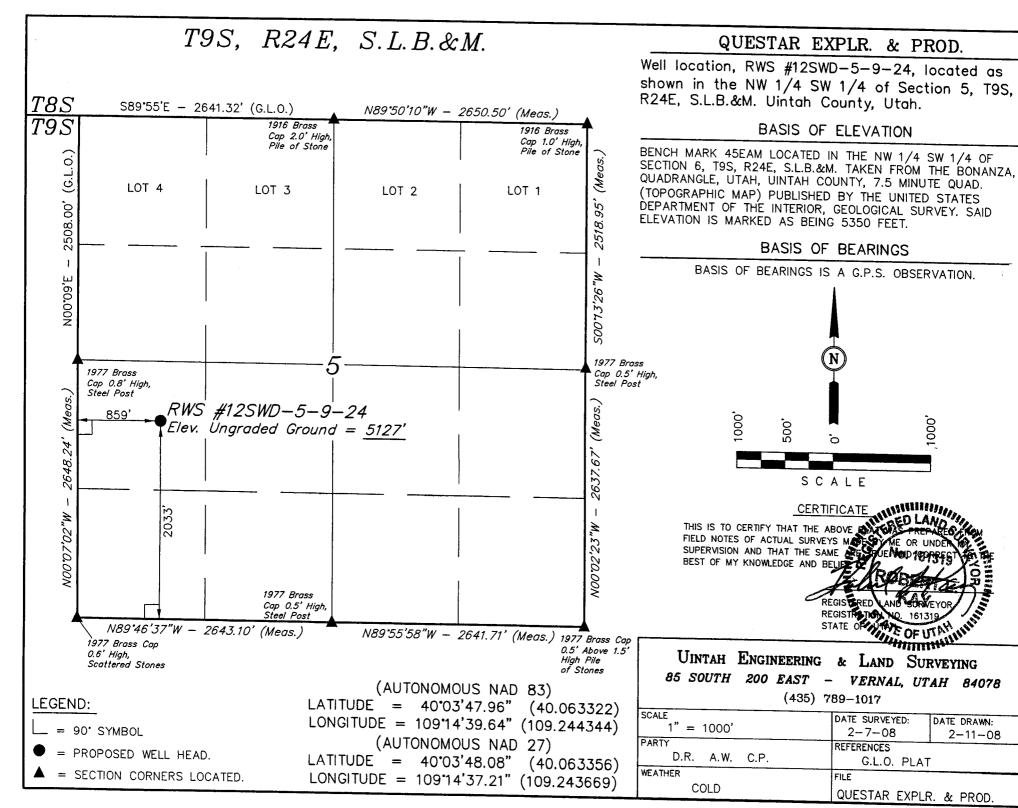


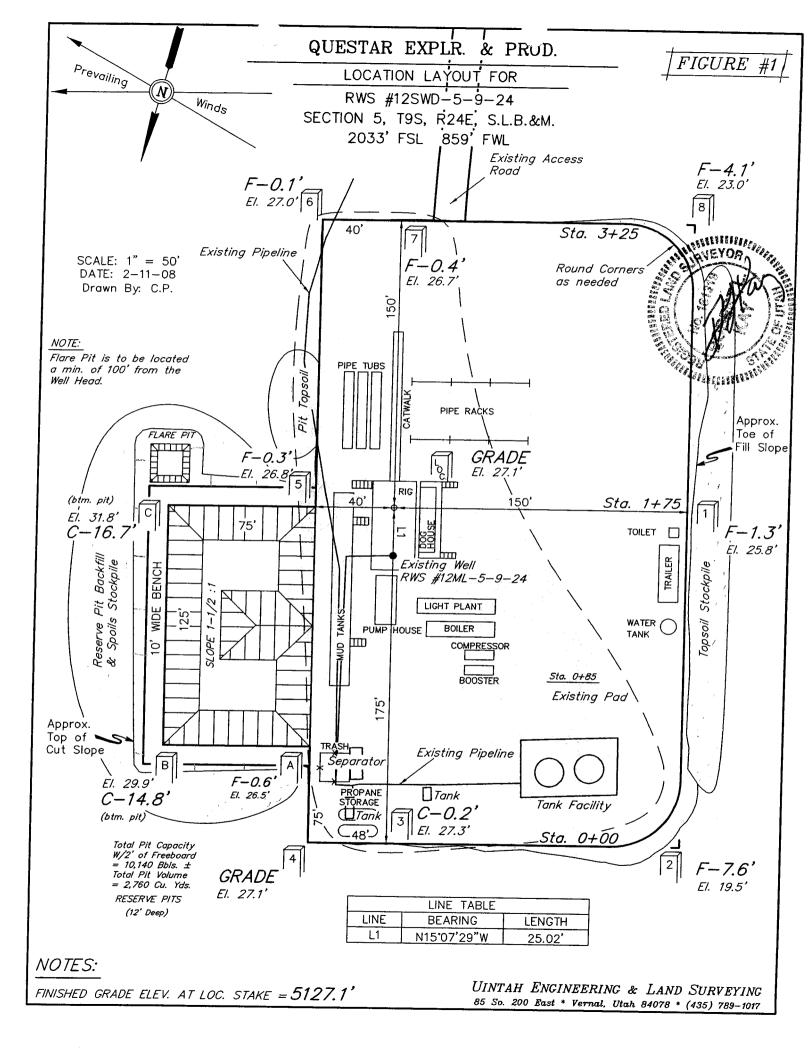


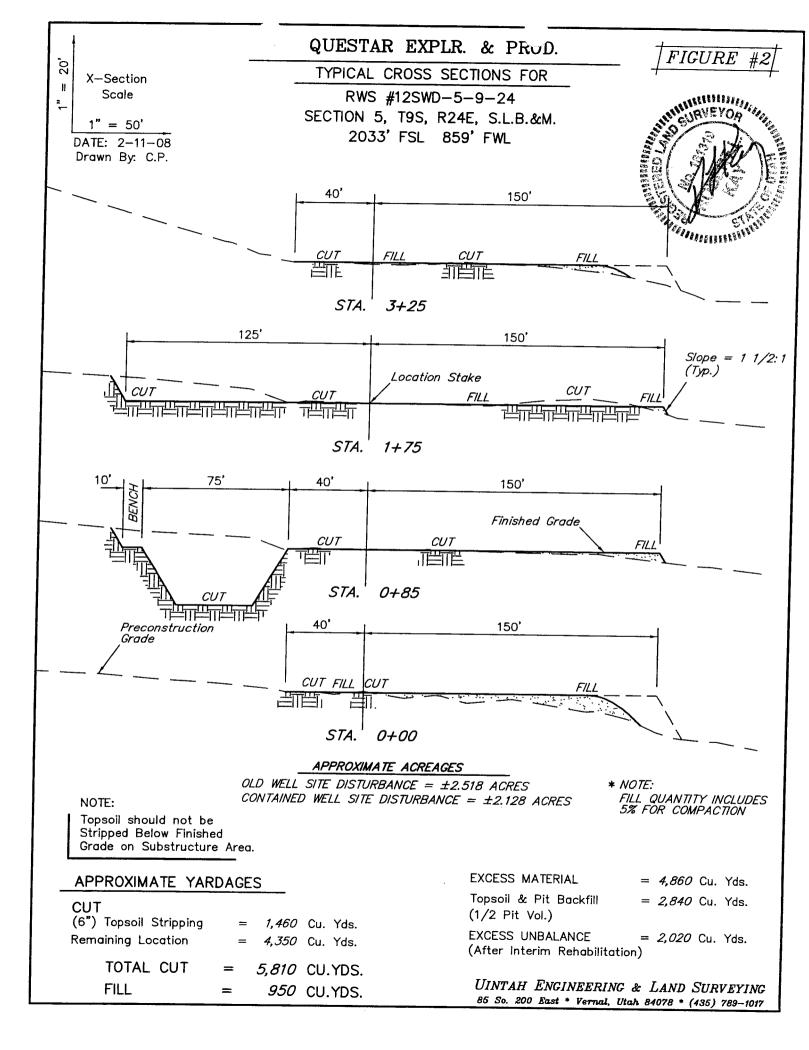


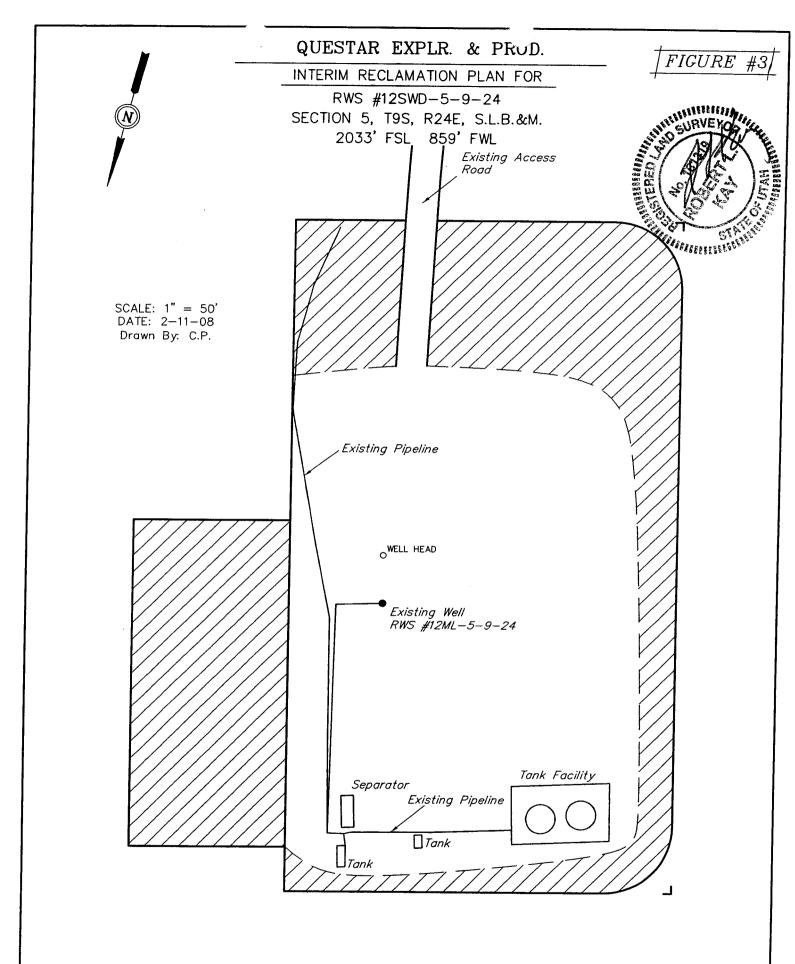


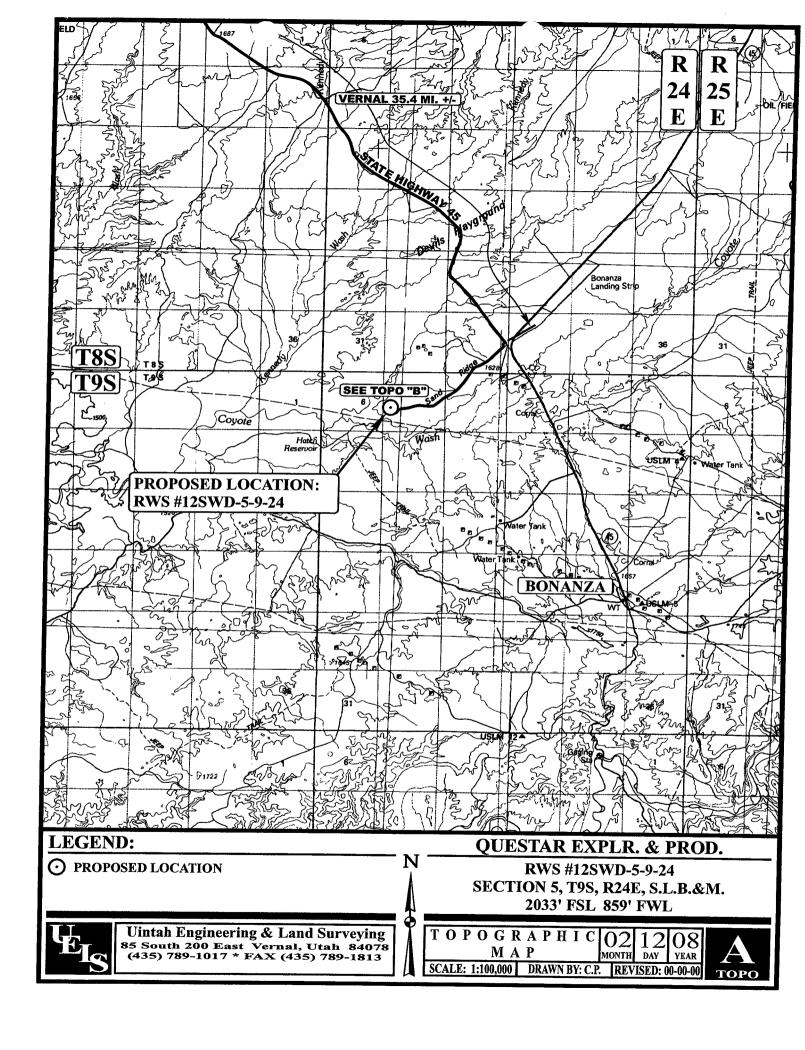


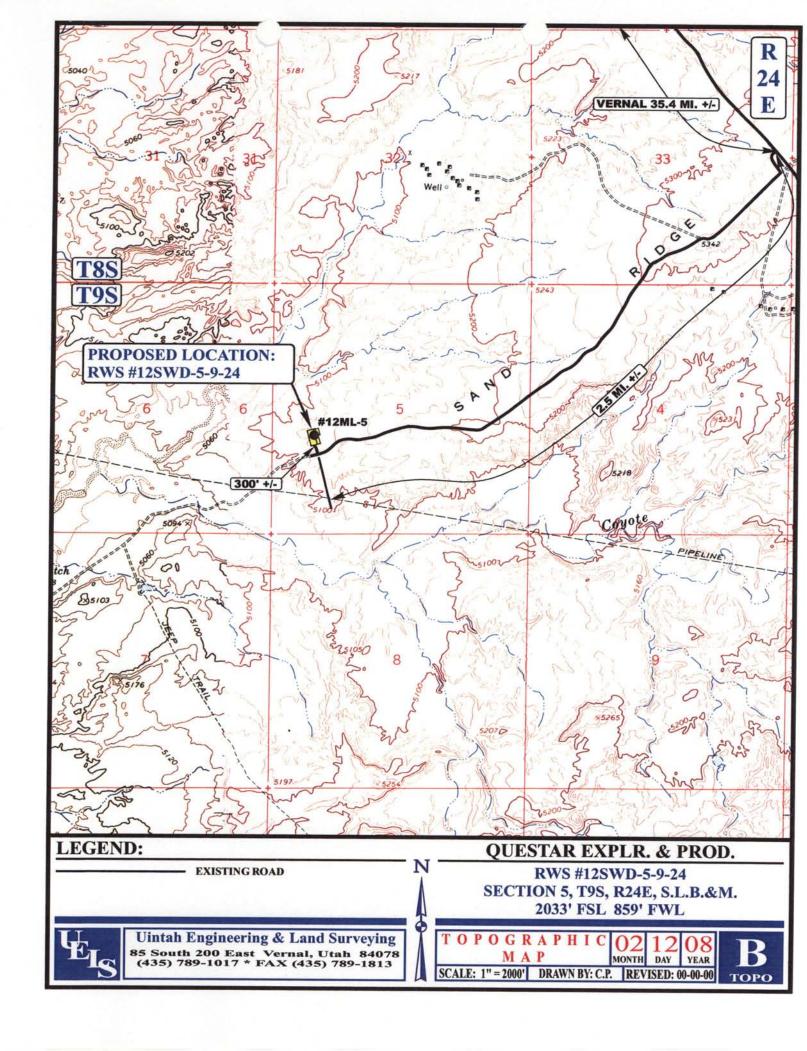


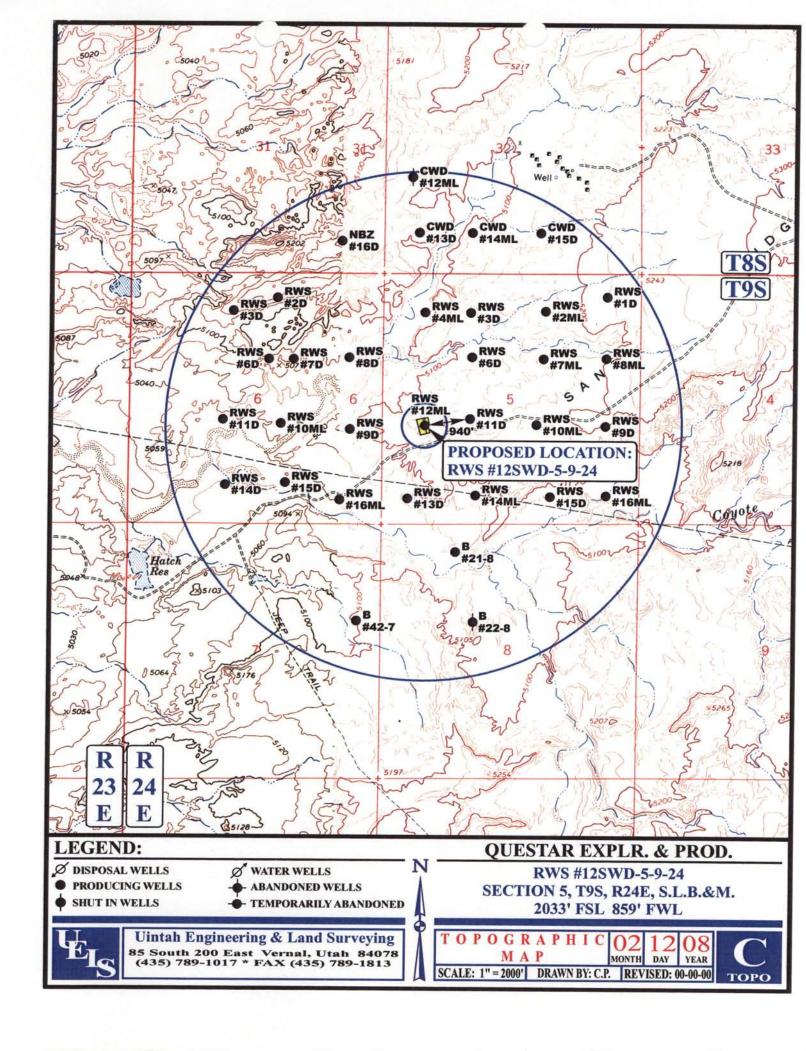








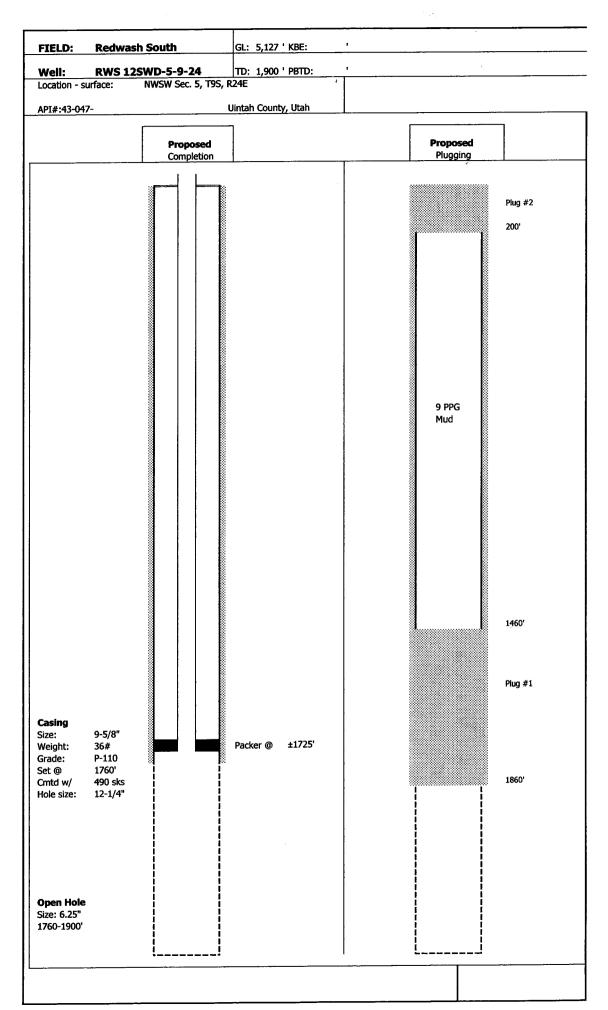




OMB No. 2040-0042

Approval Expires 1/31/05

| 1                |  |  |                           | W                                   | INVIRONMENTA<br>(ASHINGTON, D<br>AND ABAN | D.C. 20460  |  |  | Atta   | chment Q   |
|------------------|--|--|---------------------------|-------------------------------------|---|---|--|--|--|--|
|                  |  | , FIELD NAME, L  |                           |                                     |   |   | I PLAN<br>ESS, & PHONE                           | NUMBER OF  | OWNER / OF                                       | PERATOR  |
| Big Valle        | WD-5-9-24<br>y Unit<br>UTU-73456               |  |                           |                                     |   | QEP Uinta B<br>11002 East 1<br>Vernal, Utah       | 17500 South                                      |  |  |  |
|                  |  | · · · · · · · · · · · · · · · · · · ·  | STATE                     |                                     | COUNTY                                    |   |  | 21 3 1   | PERMIT NUME                                      | ER   |
|                  | Vell and Outline                               |  | Utah                      |                                     | Uintah                                    |   |  |  |  |  |
| Section          | Plat - 640 Acres                               | <b>;</b>   |                           | LOCATION DESC                       |   |   |  |  |  |  |
|                  | <u> </u>                                       | : ! !  | -                         |                                     | of_NW_ 1/4                                |   |  | Township _9                                      | S_ Range _                                       | 24E  |
|                  |  |  | Surface<br>Location       |                                     | ft. From (N/S)                            |   | e of Quarter Sec                                 |  | 11   |  |
|                  |  |  | And                       | 859                                 | _ft. From (E/W)                           | West Line   | e of Quarter Sec                                 | tion   |  |  |
|                  |  |  | <del> </del>              | TYPE O                              | F AUTHORIZ                                | ATION   | 1  | WELLA  | CTIVITY  |  |
|                  |  | ; <u></u> ;  |                           | •                                   |   |   | ☐ Class I  | *****  |  |  |
|                  |  |  |                           | ☑ Individual                        | Permit                                    |   | ☐ Hazar  | dous   |  |  |
|                  |  |  |                           | ☐ Rule                              |   |   | ☐ Nonha  |  |  |  |
|                  |  |  |                           | _                                   |   |   | ☑ Class II                                       |  |  |  |
| <u> </u>         |  |  |                           | ☐ Area Perm                         | it  |   | ☑ Brine I  |  |  |  |
|                  |  |  | l                         | **** "                              |   |   | 1  | carbon Storage                                   |  |  |
|                  |  |  | Number                    | of Wells                            |   | 1   | ☐ Class III                                      | ced Recovery                                     |  |  |
|                  |  |  | Lease Na                  | ame                                 | Big Valley Uni                            | t   | Well Number                                      | RWS 12SWD  | -5-9-24  |  |
|                  | CASI   | NG AND TUBIN   | G RECO                    | RD AFTER F                          | PLUGGING                                  |   |  | F EMPLACEM                                       |  | IENT PLUGS                                       |
| SIZE             | WT (LB/FT)                                     | TO BE PUT IN WEI   | LL (FT)                   | TOBELEE                             | T IN WELL (FT)                            | HOLE SIZE<br>(INSIDE DIAMETER)                    |  | ☑ The Balanc                                     | e Method   |  |
| 9-5/8"           | 47#  | 1760'  |                           |                                     | 760'                                      | 12.25   | 1  |  |  |  |
|                  |  |  |                           |                                     |   |   | 1  | ☐ The Dump                                       |  | '  |
|                  |  |  |                           |                                     |   |   | 1  | ☐ The Two P                                      | lug Method                                       |  |
|                  |  |  |                           | -                                   |   |   | ]  | ☐ Other  |  |  |
|                  |  | D ABANDON D  | ATA                       | Plug # 1                            | Plug # 2                                  | Plug # 3  | Plug# 4  | Plug # 5   | Plug # 6   | Plug # 7   |
|                  |  | Vill Be Placed (inches)  |                           | 9 5/8"                              | 9 5/8"                                    | <del>\</del>                                      | <del>                                     </del> | \  | <del>                                     </del> | A  |
|                  | of Tubing or Drill Pi                          |  |                           | 1860                                | 200                                       | <del>\</del> -                                    | <del>  \</del>                                   | <del>  \</del>                                   | <del>  \</del>                                   | <del>                                     </del> |
|                  | nt to be used (each p<br>to be Pumped (cu. ft) | lug)   |                           | 95.5                                | 76<br>89                                  | <del>- \                                   </del> | <del> -\</del>                                   | <del>                                     </del> | <del>                                     </del> | +  |
| Calculated Top   |  |  |                           | 1460                                | 0   | <del></del>                                       | <del>  \</del>                                   | <del>  \</del>                                   | <del>  \</del>                                   | <del>  \-</del> -                                |
|                  | of Plug (if tagged ft.)                        |  |                           | 1400                                |   | \ <u></u>   | <del>  \</del>                                   | <del>                                     </del> | <del>                                     </del> | <del> \-</del>                                   |
| Slurry Weight (L |  |  |                           | 16.4                                | 16.4                                      |   |  | \ \  | <del> \</del>                                    | <del>                                     </del> |
|                  | Other Material (Clas                           | s III)   |                           | Class "G"                           | Class "G"                                 |   | 1  | <del>                                     </del> | ļ  | 4  |
| Lŧ               | ST ALL OPEN                                    | N HOLE AND/O   | R PERF                    | DRATED INT                          | ERVALS AND                                | INTERVALS   | WHERE CAS  | NG WILL BE                                       | VARIED (if                                       | any)   |
|                  | From   |  |                           | То                                  |   | Fro   |  |  | То   |  |
|                  | 1760   |  |                           | 1900                                |   |   |  |  |  |  |
|                  |  |  |                           |                                     |   | V-11  |  |  |  |  |
|                  |  |  |                           |                                     |   |   | ···  |  |  |  |
| Estimated C      | oet to Diva Mo                                 | le l   |                           |                                     |   |   |  |  |  |  |
| Louinaleu U      | ost to Plug Wel                                | 13   |                           |                                     |   |   |  |  |  |  |
| \$32,000.0       | 00   |  |                           |                                     |   |   |  |  |  |  |
|                  |  | and Adams  | 3832                      |                                     | CERTIFICAT                                | ION   | k <u>ti</u> eryi ilk                             |  |  |  |
|                  | all attachments<br>I believe that the          | he penalty of law the<br>and that, based or<br>e information is tru<br>n, including the po | n my inqui<br>ie, accurai | iry of those indi<br>te, and comple | ividuals immedia<br>te. I am aware t      | tely responsible<br>hat there are sig             | for obtaining the                                | e information,                                   |  |  |
| AME AND OF       | FICIAL TITLE (Pleas                            | e type or print)   | 1                         |                                     | SIGNATURE                                 | V 12 24 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1         |  |  | DATE SIGNED                                      |  |
|                  |  | eum Engineer   |                           |                                     | This                                      | 2   | 2  |  |  | /2008  |
| PA Form 752      | 20-14 (Rev. 8-01)                              |  |                           | ·                                   |   |   |  |  |  |  |







Questar Exploration and Production Company

180 East 100 South P.O. Box 45601 Salt Lake City, UT 84145-0601 Tel 801 324 2600 • Fax 801 324 2001

May 29, 2008

Via FEDEX

Britta Copt
Office of Enforcement, Compliance & Environmental Justice
U. S. Environmental Protection Agency, Region 8
1595 Wynkoop (8ENF-UFO)
Denver, CO 80202-1129

RE:

QEP Uinta Basin, Inc. Bond 965-003-769

Please find enclosed for handling a Change Rider to the referenced bond to change the name of the principal on the bond to Questar Exploration and Production Company and to update the dollar amount based on the EPA-compiled average industry cost for plugging and abandoning injection wells in our geographic region, which is \$59,344 per well. The amount of the bond will be increased from \$2,070,000 to \$6,290,464 to comply with the federal financial assurance requirement. I'm also including a copy of the EPA well listing updated as of 5/21/08.

Please sign your acceptance of the Rider where indicated and return a copy to my attention at the letterhead address.

Thank you for your immediate attention in this regard. If you have any questions or need further information regarding the bond, please don't hesitate to contact me at (801) 324-2678.

Sincerely,

Benita Johnson

Renita Johnson

Risk Management – QMR

### **CHANGE RIDER**

| Ride         | to be attached to and form a part o                 | of Bond Numbe        | r 965003                         | 769, dated the                 |
|--------------|---|----------------------|----------------------------------|--------------------------------|
| 6th          | day of <u>December</u>                              | _, <u>2003</u> _, ex | ecuted by                        | Liberty Mutual Insurance       |
| _ Company    | (the "Surety") on behalf of                         | QEP Uinta Ba         | sin, Inc.                        |                                |
|              |   |                      |                                  | (the "Principal                |
| in favor of  | U. S. Environmental Protection Ag                   | ency                 |                                  | (the "Obligee"                 |
| The P        | rincipal and the Surety hereby cons                 | sent to changii      | ng the attac                     | ched bond as follows:          |
| The i        | name of the principal shall be chan                 | ged :                |                                  |                                |
| FROI         | M: QEP Uinta Basin, Inc.                            |                      |                                  |                                |
| TO:          | Questar Exploration and Produc                      | tion Company         |                                  |                                |
| The a        | mount of the bond shall be increase                 | ed:                  |                                  |                                |
| FROM         | l: Two million seventy thousand and                 | d no/100             | (\$2,070,0                       | 00.00)                         |
| то:          | Six million two hundred ninety the (\$6,290,464.00) | ousand four h        | undred six                       | ty four and no/100-            |
| This c       | hange is effective <u>30th</u> c                    | lay of <u>May</u>    | <i>,</i>                         | , 2008 .                       |
|              | tached bond shall be subject to all                 |                      |                                  |                                |
| herein modif | ied.  |                      |                                  |                                |
| Signe        | d, sealed and dated this 22 <sup>nd</sup>           | _ day ofl            | May                              | <b>, 2008</b> .                |
| WITNESS or   | ATTEST:   | Questar E            |                                  | and Production Company_        |
| - XIVI       | //  | Ву:                  | >                                | (Seal)                         |
| •            |   |                      |                                  | •                              |
|              |   | Title: ] Liberty N   | President<br><b>Nutual Ins</b> u | a CEO<br>rance Company(Surety) |
|              |   | By:                  | te J. Crosh                      | (Seal) aw Attorney-in-Fact     |
| ACCEPTED:    |   |                      | T - 7                            | til two                        |
|              |   |                      |                                  |                                |
| Name:        | (Obligee)   |                      |                                  |                                |
| Title:       |   |                      |                                  |                                |
| Date:        |   |                      |                                  |                                |

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

#### LIBERTY MUTUAL INSURANCE COMPANY BOSTON, MASSACHUSETTS POWER OF ATTORNEY

|             | KNOW ALL PERSONS BY THESE PRESENTS: That Liberty Mutual Insurance Company (the "Company"), a Massachusetts stock insurance company, pursuant to and by authority of the By-law and Authorization hereinafter set forth, does hereby name, constitute and appoint JONATHAN M. JEPSEN, WILLIAM R. MORETON, PHILIP S. WALTER, BETTE J. CROSHAW, JUDY PARRY, VALORIE JARVIS ALL OF THE CITY OF SALT LAKE CITY, STATE OF UTAH   | 3,  |
|-------------|--|---|
|             | , each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations in the penal sum not exceeding ONE HUNDRED TWENTY FIVE MILLION AND 00/100*********************************   |   |
|             | execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents, shall be as binding upon the Company as if they had been duly signed by the president and attested by the secretary of the Company in their own proper persons.   |   |
|             | That this power is made and executed pursuant to and by authority of the following By-law and Authorization:   | ſ <del></del>   |
|             | ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.  Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary. | ey call<br>EST on any business day.                                   |
| Ġ.          | By the following instrument the chairman or the president has authorized the officer or other official named therein to appoint attorneys-in-fact:   | nq /  |
| nalaille    | Pursuant to Article XIII, Section 5 of the By-Laws, Garnet W. Elliott, Assistant Secretary of Liberty Mutual Insurance Company, is hereby authorized to appoint such attorneys-in-fact as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.  | call<br>T on any  |
| ינ<br>מ     | That the By-law and the Authorization set forth above are true copies thereof and are now in full force and effect.  | ey<br>ES  |
| nal val     | IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Company and the corporate seal of Liberty Mutual Insurance Company has been affixed thereto in Plymouth Meeting, Pennsylvania this 13th day of March, 2008  | of Attorne<br>4:30 pm l   |
| 200         | LIBERTY MUTUAL INSURANCE COMPANY   | rer o   |
| st rate of  | COMMONWEALTH OF PENNSYLVANIA ss  | f this Pow<br>9:00 am a   |
| ie, interes | On this 13th day of March , 2008, before me, a Notary Public, personally came Garnet W. Elliott, to me known, and acknowledged that he is an Assistant Secretary of Liberty Mutual Insurance Company; that he knows the seal of said corporation; and that he executed the above Power of Attorney and affixed the corporate seal of Liberty Mutual Insurance Company thereto with the authority and at the direction of said corporation.   | confirm the validity of this Power of 10-832-8240 between 9:00 am and |
| ا           | IN TESTIMONY WHEREOF, Lhave hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.   | the 3240  |
| current     | COMMONWEALTH OF PENNSYLVANIA  Notarial Social  Teresca Passida, Notary Public Physicach Tivp., Montgomery County My Commission Expires Mar. 28, 2003  Teresca Pastella, Notary Public  | 5 confirm<br>610-832-   |
|             | CERTIFICATE Mumber, Pennsylvania Association of Notaries   | 10  |
|             | I, the undersigned, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this certificate; and I do further certify that the officer or official who executed the said power of attorney is an Assistant Secretary specially authorized by the chairman or the president to appoint attorneys-in-fact as provided in Article XIII, Section 5 of the By-laws of Liberty Mutual Insurance Company.   |   |
|             | This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the following vote of the board of directors of Liberty Mutual Insurance Company at a meeting duly called and held on the 12th day of March, 1980.   |   |
|             | VOTED that the facsimile or mechanically reproduced signature of any assistant secretary of the company, wherever appearing upon a certified copy of any power of attorney issued by the company in connection with surety bonds, shall be valid and binding upon the company with the same force and effect as though manually affixed.   |   |
|             | IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said company, this day of   |   |
|             | By david M. Carey, Assistant Secretary   |   |

# Questar Exploration and Production Company EPA UIC Well List Bond # 965-003-769

Schedule A Revised 05/21/08

| NEW WELL NAME | API Number   | Location                 | Bond Portion   | UIC Permit#   |
|---------------|--------------|--------------------------|--|---------------|
| RW 14-24A     | 43-047-15166 | SWSW Section 24-T7S-R22E | \$59,344.00  | UT20949-06160 |
| GB 3-17       | 43-047-31556 | SESE Section 17-T8S-R22E | \$59,344.00  | UT20967-06377 |
| WV 3G-8-8-22  | 43-047-34596 | NENW Section 8-T8S-R22E  |  | UT20954-06195 |
| RW 33-30B     | 43-047-33790 | NWSE Section 30-T7S-R23E | \$59,344.00  | UT2928-04650  |
| RW 11-30B     | 43-047-33785 | NWNW Section 30-T7S-R23E |  | UT2929-04658  |
| RW 13-20B     | 43-047-33498 | NWSW Section 20-T7S-R23E | \$59,344.00  | UT2896-04605  |
| RW 33-20B     | 43-047-33500 | NWSE Section 20-T7S-R23E | \$59,344.00  | UT2895-04604  |
| RW 33-19B     | 43-047-33499 | NWSE Section 19-T7S-R23E | \$59,344.00  | UT2903-04611  |
| RW 13-19B     | 43-047-33497 | NWSW Section 19-T7S-R23E | \$59,344.00  | UT2897-04606  |
| RW 11-20B     | 43-047-33553 | NWNW Section 20-T7S-R23E | \$59,344.00  | UT2894-04603  |
| RW 11-19B     | 43-047-33552 | NWNW Section 19-T7S-R23E | \$59,344.00  | UT2902-04610  |
| RW 34-24A     | 43-047-33568 | SWSE Section 24-T7S-R22E | \$59,344.00  | UT2898-04607  |
| RW 11-25A     | 43-047-33574 | NWNW Section 25-T7S-R22E |  | UT2900-04609  |
| RW 31-25A     | 43-047-33577 | NWNE Section 25-T7S-R22E |  | UT2899-04608  |
| RW 33-25A     | 43-047-33578 | NWSE Section 25-T7S-R22E | \$59,344.00  | UT2904-04612  |
| RW 31-19B     | 43-047-33555 | NWNE Section 19-T7S-R23E | \$59,344.00  | UT2911-04616  |
| RW 11-29B     | 43-047-33590 | NWNW Section 29-T7S-R23E | ***************************************  | UT2915-04629  |
| RW 13-25A     | 43-047-33575 | NWSW Section 25-T7S-R22E | \$59,344.00  | UT2925-04648  |
| RW 31-30B     | 43-047-33788 | NWNE Section 30-T7S-R23E | \$59,344.00  | UT2926-04649  |
| RW 34-13A     | 43-047-33593 | SWSE Section 13-T7S-R22E |  | UT2922-04643  |
| RW 12-24A     | 43-047-33591 | SWNW Section 24-T7S-R22E |  | UT2921-04642  |
| RW 23-18B     |              | NESW Section 18-T7S-R23E |  | UT2000-02404  |
| RW 41-24A     |              | SENE Section 24-T7S-R22E |  | UT2000-02406  |
| RW 23-17B     |              | NESW Section 17-T7S-R23E |  | UT2835-04402  |
| RW 43-18B     |              | NESE Section 18-T7S-R23E |  | UT2833-04400  |
| RW 41-20B     |              | NENE Section 17-T7S-R23E |  | UT2810-04346  |
| RW 14-24B     |              | SWSW Section 24-T7S-R23E |  | UT2000-02416  |
| RW 41-21B     |              | NENE Section 21-T7S-R23E |  | UT2000-02426  |
| RW 41-27B     |              | NENE Section 27-T7S-R23E | THE PERSON NAMED AND ADDRESS OF THE PERSON NAMED AND ADDRESS O | UT2000-02417  |
| RW 34-27B     | <del></del>  | SWSE Section 27-T7S-R23E |  | UT2000-02395  |
| RW 14-13B     |              | SWSW Section 13-T7S-R23E |  | UT2000-02396  |
| RW 21-23B     |              | NENW Section 23-T7S-R23E |  | UT2000-02397  |
| RW 23-23B     |              | NESW Section 23-T7S-R23E |  | UT2000-02420  |
| RW 23-14B     |              | NWSW Section 14-T7S-R23E |  | UT2000-02398  |
| RW 32-19B     |              | SWNE Section 19-T7S-R23E |  | UT2000-02399  |
| RW 41-28B     |              | NENE Section 28-T7S-R23E |  | UT2000-02400  |
| RW 12-24B     |              | SWNW Section 24-T7S-R23E |  | UT2000-02421  |
| RW 33-22B     |              | NWSE Section 22-T7S-R23E |  | UT2000-02423  |
| RW 43-27B     | <del> </del> | NESE Section 27-T7S-R23E |  | UT2000-02424  |
| RW 23-18C     |              | NESW Section 18-T7S-R24E |  | UT2000-02425  |
| RW 13-22B     |              | NWSW Section 22-T7S-R23E |  | UT2000-02407  |
| RW 31-22B     |              | NWNE Section 22-T7S-R23E |  | UT2000-02408  |
| RW 23-15B     |              | NESW Section 15-T7S-R23E |  | UT2000-02409  |
| RW 21-21B     |              | NENW Section 21-T7S-R23E |  | UT2000-02409  |
| RW 21-21B     |              | NENW Section 20-T7S-R23E |  | UT2000-02439  |
| RW 14-21B     |              | SWSW Section 21-T7S-R23E |  | UT2000-02411  |

| [DIAL 22 42D           | 40 047 45000 | MANOE Ocalica 40 TTO DOOF | 000044001470000000440    |
|------------------------|--------------|---------------------------|--------------------------|
| RW 33-13B              |              | NWSE Section 13-T7S-R23E  | \$59,344.00 UT2000-02412 |
| RW 41-14B              |              | NENE Section 14-T7S-R23E  | \$59,344.00 UT2000-02441 |
| RW 41-33B              |              | NENE Section 33-T7S-R23E  | \$59,344.00 UT2661-02444 |
| RW 31-35B<br>RW 43-17B |              | NWNE Section 35-T7S-R23E  | \$59,344.00 UT2000-02449 |
|                        |              | NESE Section 17-T7S-R23E  | \$59,344.00 UT2832-04399 |
| RW 42-35B              |              | SENE Section 35-T7S-R23E  | \$59,344.00 UT2000-02458 |
| RW 31-26B              |              | NWNE Section 26-T7S-R23E  | \$59,344.00 UT2000-02455 |
| RW 11-36B              |              | NWNW Section 36-T7S-R23E  | \$59,344.00 UT2000-02453 |
| RW 34-22A              |              | SWSE Section 22-T7S-R22E  | \$59,344.00 UT2812-04348 |
| RW 43-21A              |              | NESE Section 21-T7S-R22E  | \$59,344.00 UT2000-02463 |
| RW 43-28A              |              | NESE Section 28-T7S-R22E  | \$59,344.00 UT2918-02445 |
| RW 21-27A              |              | NENW Section 27-T7S-R22E  | \$59,344.00 UT2000-02446 |
| RW 43-28B              |              | NESE Section 28_T7S-R23E  | \$59,344.00 UT2000-02419 |
| RW 41-15B              |              | NENE Section 15-T7S-R23E  | \$59,344.00 UT2000-02438 |
| RW 21-34A              |              | NENW Section 34-T7S-R22E  | \$59,344.00 UT2000-02415 |
| RW 24-26B              |              | SESW Section 26-T7S-R23E  | \$59,344.00 UT2000-02448 |
| RW 33-26B              |              | NWSE Section 26-T7S-R23E  | \$59,344.00 UT2000-02451 |
| RW 13-26B              | **           | NWSW Section 26-T7S-R23E  | \$59,344.00 UT2000-02452 |
| BRENNAN 5              |              | SENW Section 18-T7S-R21E  | \$59,344.00 UT2807-04341 |
| BRENNAN 11             |              | SESW Section 18-T7S-R21E  | \$59,344.00 UT2807-04342 |
| WV 120                 |              | NENW Section 22-T8S-R21E  | \$59,344.00 UT2770-04264 |
| WV 16                  |              | NENE Section 15-T8S-R21E  | \$59,344.00 UT2000-02469 |
| WV 21                  |              | NENE Section 16-T8S-R21E  | \$59,344.00 UT2000-02471 |
| WV 31                  |              | NENW Section 14-T8S-R21E  | \$59,344.00 UT2000-02384 |
| WV 36                  |              | NESW Section 10-T8S-R21E  | \$59,344.00 UT2000-02479 |
| WV 41                  |              | NENW Section 15-T8S-R21E  | \$59,344.00 UT2000-02483 |
| WV 50                  |              | SENE Section 15-T8S-R21E  | \$59,344.00 UT2563-03504 |
| WV 59                  |              | SWNW Section 14-T8S-R21E  | \$59,344.00 UT2564-03505 |
| WV 60                  |              | SWSE Section 15-T8S-R21E  | \$59,344.00 UT2565-03506 |
| WV 67                  |              | NESW Section 15-T8S-R21E  | \$59,344.00 UT2000-02497 |
| WV 68                  |              | NESE Section 15-T8S-R21E  | \$59,344.00 UT2000-02498 |
| WV 72                  |              | SWSW Section 16-T8S-R21E  | \$59,344.00 UT2000-02501 |
| WV 73                  |              | NESE Section 16-T8S-R21E  | \$59,344.00 UT2000-02502 |
| WV 78                  |              | NESW Section 16-T8S-R21E  | \$59,344.00 UT2000-02504 |
| WV 126                 |              | NWNE Section 21-T8S-R21E  | \$59,344.00 UT2000-02509 |
| WV 140                 |              | NWNW Section 15-T8S-R21E  | \$59,344.00 UT2567-03508 |
| WV 143                 |              | NWSE Section 10-T8S-R21E  | \$59,344.00 UT2568-03509 |
| WV 28-2                |              | NESW Section 11-T8S-R21E  | \$59,344.00 UT2000-02510 |
| WV 40-2                |              | NESE Section 10-T8S-R21E  | \$59,344.00 UT2000-02511 |
| WV 71-2                |              | SWSW Section 15-T8S-R21E  | \$59,344.00 UT2712-03777 |
| WV 35                  |              | NESW Section 14-T8S-R21E  | \$59,344.00 UT2813-04351 |
| WV 97                  |              | NWSW Section 11-T8S-R21E  | \$59,344.00 UT2814-04350 |
| GH 1-20                |              | NESW Section 20-T8S-R21E  | \$59,344.00 UT2726-03792 |
| GH 2-20                |              | NESE Section 20-T8S-R21E  | \$59,344.00 UT2634-03722 |
| GH 3-21                |              | SWNW Section 21-T8S-R21E  | \$59,344.00 UT2540-02714 |
| GH 3                   | ······       | NENE Section 20-T8S-R21E  | \$59,344.00 UT2759-04241 |
| GH 6                   |              | NENW Section 20-T8S-R21E  | \$59,344.00 UT2760-04242 |
| GH 8                   | <del></del>  | SWNE Section 20-T8S-R21E  | \$59,344.00 UT2541-02715 |
| GH 10                  |              | NWSE Section 21-T8S-R20E  | \$59,344.00 UT2632-03721 |
| GH 12                  |              | NESE Section 19-T8S-R21E  | \$59,344.00 UT2727-03794 |
| GH 15                  |              | SWSW Section 20-T8S-R21E  | \$59,344.00 UT2804-04336 |
| GH 17                  |              | SWSE Section 20-T8S-R21E  | \$59,344.00 UT2805-04337 |
| GB 6-16                |              | SENW Section 16-T8S-R22E  | \$59,344.00 UT2878-04539 |
| GB 15-19-8-22          |              | SWSE Section 19-T8S-R22E  | \$59,344.00 UT2806-04338 |
| GB 7-16                | 43-047-32582 | SWNE Section 16-T8S-R22E  | \$59,344.00 UT2803-04335 |

| TOTAL WELLS: 106 |              |                          | \$6,290,464.00 |              |
|------------------|--------------|--------------------------|----------------|--------------|
| RW 43-15B        | 43-047-31682 | NESE Section 15-T7S-R23E | \$59,344.00    | UT2834-04401 |
| RW 44-26B        |              | SESE Section 26-T7S-R23E | \$59,344.00    | UT2000-02450 |
| RW 14-18B        |              | SWSW Section 18-T7S-R23E | \$59,344.00    | UT2811-04347 |
| GB 12-16         |              | NWSW Section 16-T8S-R22E | \$59,344.00    | UT2765-04248 |
| GB 22-20         | <del></del>  | SENW Section 20-T8S-R22E | \$59,344.00    | UT2755-04235 |

## SURETY PERFORMANCE BOND

U.S. ENVIRONMENTAL PROTECTION AGENCY UNDERGROUND INJECTION CONTROL FINANCIAL RESPONSIBILITY REQUIREMENT

Regional Administrator
ATTN: Underground Injection Control BENF-T

Pinancial Responsibility U.S. EPA Region VIII 199 18th Street, Suite 500 Denver, Colorado 80202-2466

| BOND COVERS THE PLUGGING OF INJECTION WELLS   |
|---|
| Date bond executed:November 18, 2003  |
| Effective Date: December 6. 2003  |
| Principal: QEP Uinta Basin, Inc. (Legal name of owner or operator)  |
| 180 East 100 South, Salt Lake City, UT 84111 (Business address of owner or operator)  |
| corporation   |
| (Individual, joint venture, partnership, or corporation)  |
| State of incorporation:   |
| Surety(ies): Liberty Mutual Insurance Company (Name)  |
| 370 East South Temple, Suite 250, Salt Lake City, UT 84111 (Business Address)   |
| EPA Identification number, name, address, and plugging and abandonment amount(s) for each injection well guaranteed by this bond. (Indicate plugging and abandonment amounts for each well. Attach separate list if necessary.) |
| Injection Well Information Plug & Abandon Amount  |
| See Schedule "A" for List of Wells \$18,000 per well 116 wells  |
| Total penal sum of bond: \$ 2,088,000.00  |
| Surety's bond number: 965-003-769   |

KNOW ALL PERSONS BY THESE PRESENTS. That we, the Principal and Surety(ies) hereto are firmly bound to the U.S. Environmental protection Agency (hereinafter called EPA), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as cosureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is it set forth opposite the name of such Surety, but if no limit of lability is indicated, the limit of liability shall be the full amount of the penal sum.

WHEREAS said Principal is required, under the Underground Injection Control Regulations, as amended, to have a permit or comply with provisions to operate under rule for each injection well identified above, and

WHEREAS said Principal is required to provide financial assurance for plugging and abandonment as a condition of the permit or approval to operate under rule, and

WHEREAS said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall faithfully perform plugging and abandonment, whenever required to do so, of each injection well for which this bond guarantees plugging and abandonment, in accordance with the plugging abandonment plan and other requirements of the permit or provisions for operating under rule and other requirements of the permit or provisions for operating under rule as may be amended, pursuant to all applicable laws, statutes, rules and regulations, as such laws, statutes, rules, and regulations may be amended.

Or, if the Principal shall provide alternate financial assurance as specified in Subpart F of 40 CFR 144, and obtain the EPA Regional Administrator's written approval of such assurance, within 90 days after the date of notice of cancellation is received by both the Principal and the EPA Regional Administrator(s), from the Surety(ies), then this obligation shall be null and void. Otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by an EPA Regional Administrator that the Principal has been found in violation of the plugging and abandonment requirements of 40 CFR 144, for an injection well which

this bond guarantees performances of plugging and abandonment, the Surety(ies) shall either perform plugging and abandonment with the plugging and abandonment plan and other permit conditions or provisions for operating under rule and other requirements or place the amount for plugging and abandonment into a standby trust fund as directed by the EPA Regional Administrator.

Upon notification by an EPA Regional Administrator that the Principal has failed to provide alternate financial assurance as specified in Subpart F of 40 CFR 144, and obtain written approval of such assurance from the EPA Regional Administrator(s) during the 90 days following receipt by both the Principal and the EPA Regional Administrator(s) of a notice of cancellation of the bond, Regional Administrator(s) of a notice of cancellation of the bond, the Surety(ies) shall place funds in the amount guaranteed for the injection well(s) into the standby trust fund as directed by the EPA Regional Administrator.

The Surety(ies) hereby waive(s) notification of amendments to plugging and abandonment plans, permits, applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice by certified mail to the owner or operator and to the EPA Regional Administrator(s) for the Region(s) in which the injection well(s) is (are) located, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the EPA Regional Administrator(s), as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies); provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Regional Administrator(s) of the EPA Region(s) in which the bonded injection well(s) is (are) located.

(The following paragraph is an optional rider that may be included but is not required.)

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new plugging and abandonment amount, provided that the penal sum does not increase by more than 20% in any one year, and no decrease in the penal sum takes place without the written permission of the EPA Regional Administrator(s).

IN WITNESS WHEREOF. The Principal and Surety(ies) have executed this Performance Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording on this surety bond is identical to the wording specified in 40 CFR 144.70(c), as such regulation was constituted on the date this bond was executed.

| PRINCIPAL:                                     | CORPORATE SURETY (IES):  |
|--|--|
| QEP Vinta Basin, Inc.                          | Liberty Mutual Insurance Company   |
| (Name)   | (Name)   |
| 180 East 100 South<br>Salt Lake City, UT 84111 | 370 East South Temple, Suite 250<br>Salt Lake City, UT 84111                     |
| (Address)                                      | (Address)  |
| C.B. Stanley President and CEO  (TATLE)        | Surety/Telephone Number  (Signature)  Gary V. Manville Attorney-in-Fact  (Title) |
| «Corporațe Seal                                | Corporate Seal   |
|  |  |
| Delaware<br>State of Incorporation             | Massachusetta State of Incorporation   |
| \$ 26,100.00<br>Bond Premium                   | \$ 283,337,000.00<br>Liability Limit   |

'(For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.)

## NOTICE FROM SURETY REQUIRED BY TERRORISM RISK INSURANCE ACT OF 2002

In accordance with the Terrorism Risk Insurance Act of 2002 (referred to hereinafter as the "Act"), this disclosure notice is provided for surety bonds on which one or more of the following companies is the issuing surety: Liberty Mutual Insurance Company; Liberty Mutual Fire Insurance Company; LM Insurance Corporation; The First Liberty Insurance Corporation; Liberty Insurance Corporation; Employers Insurance Company of Wausau (formerly "EMPLOYERS INSURANCE OF WAUSAU A Mutual Company"); Peerless Insurance Company; and any other company that is a part of or added to the Liberty Mutual Group for which surety business is underwritten by Liberty Bond Services (referred to collectively hereinafter as the "Issuing Sureties").

## NOTICE FORMS PART OF BOND

This notice forms part of surety bonds issued by any one or more of the Issuing Sureties.

## DISCLOSURE OF PREMIUM

The premium attributable to any bond coverage for "acts of terrorism" as defined in Section 102(1) of the Act is Zero Dollars (\$0.00).

# DISCLOSURE OF FEDERAL PARTICIPATION IN PAYMENT OF TERRORISM LOSSES

The United States will reimburse the Issuing Sureties for ninety percent (90%) of any covered losses from terrorist acts certified under the Act exceeding the applicable surety deductible.

## emed herein, and they have no authority to I

e Company except in the manner and to

## LIBERTY MUTUAL INSURANCE COMPANY BOSTON, MASSACHUSETTS

POWER OF ATTORNEY KNOW ALL PERSONS BY THESE PRESENTS: That Liberty Mutual Insurance Company (the "Company"), a Massachusetts stock insurance

company, pursuant to and by authority of the By-law and Authorization hereinafter set forth, does hereby name, constitute and appoint JONATHAN M. JEPSEN, GARY W. MANYILLE, WILLIAM R. MORETON, SHARRON RUSHTON, PHILIP S. WALTER. BETTE J. CROSHAW, JUDY PARRY, ALL OF THE CITY OF SALT LAKE CITY, STATE OF UTAH...

each individually if there be more than one named, its true and lawful attorney in fact to make, execute, seal, acknowledge and deliver, for and on its execution of such undertakings; bonds, recognizances and other surety obligations; in pursuance of these presents, shall be as binding upon the Company as if they had been duly signed by the president and attested by the secretary of the Company tri their own proper persons.

That this power is made and executed pursuant to and by authority of the following By law and Authorization:

ARTICLE XIII - Execution of Contracts: Section 5. Surely Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys in fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

By the following instrument the chairman or the president has authorized the officer or other official named therein to appoint attorneys in fact:

Pursuant to Article XIII, Section 5 of the By-Laws, Timothy C. Mulloy, Assistant Secretary of Liberty Mutual Insurance Company, is hereby authorized to appoint such attorneys-in-fact as may be necessary to act in behalf of the Company to make, execute, seel, acknowledge and deliver as surety any and all undertakings; bonds, recognizances and other surety obligations;

That the By-law and the Authorization set forth above are true copies thereof and are now in full force and effect.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Company and the corporate seal of Liberty Mutual insurance Company has been affixed thereto in Plymouth Meeting, Pennsylvania this 20th day or November

LIBERTY MUTUAL INSURANCE COMPANY

Timothy C: Mulloy-Assistant Secretary

COMMONWEALTH OF PENNSYLVANIA COUNTY OF MONTGOMERY

On this 20th day of November , 2002 before me, a Notary Public, personally came Timothy C. Multov, to me known, and acknowledged that he is an Assistant Secretary of Liberty Multual Insurance Company; that he knows the seal of said corporation; and that he executed the above Power of Attorney and affixed the corporate seal of Liberty Multual Insurance Company thereto with the authority and at the direction of said corporation.

There are unto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year IN TESTIMONY WHE

first above written:

Notarial Sea)

Tere sa Passett "Noisry Tobic

Plymouth Two, Reinfosorery Chinny
My Commission Expires Real #9, 2005

Teresa Pastella, Notary Public

CERTIFICATE

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the undersigned. Assistant Secretary of Liberty Mutual Insurance Company, do hereby parting that the original power of attorney of which the foregoing is a full, true and correct copy, is in the force and effect on the date of this certificate; and full do further certify that the officer or official who executed the said power of attorney is an Assistant Secretary specially authorized by the chairman of the president to appoint attorney in fact as provided in Article. XIII, Section 5 of the By-laws of Uberty Mutual Insurance Company:

This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the following vote of the board of directors of Liberty Mutual Insurance Company at a meeting duly called and held on the 12th day of Merch, 1980.

VOTED that the facsimile or mechanically reproduced signature of any assistant secretary of the company, wherever appearing upon a certified copy of any power of attorney issued by the company in connection with surety bonds, shall be valid and binding upon the company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF. I have hereunto subscribed my name and affixed the corporate seal of the said company, this



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Schedule A

| Well Name          | Number        | API Number   | Location                 | Bond Portion UIC Permit#                             |
|--------------------|---------------|--------------|--------------------------|--|
| OUGB               | 1G-19-8-22    | 43-047-34696 | NENE Section 19-T8S-R22E | \$18,000.00 UIC App Not Filed                        |
| Antelope Draw (AD) | 3-17-3C       | 43-047-31556 | SESE Section 17-T8S-R22E | \$18,000.00 UIC App Not Filed                        |
| WV                 | 3G-8-8-22     | 43-047-34596 | NENW Section 8-T8S-R22E  | \$18,000.00 Pending Permit                           |
| WV                 | 16W-11-8-21   | 43-047-34155 | SESE Section 11-T8S-R21E | \$18,000.00 UtC App Not Filed                        |
| SU                 | 15G-5-8-22    | 43-047-34390 | SWSE Section 5-T8S-R22E  | \$18,000.00 Pending Permit                           |
| SU                 | 13G-5-8-22    | 43-047-34389 | SWSW Section 5-T8S-R22E  | \$18,000.00 Pending Permit                           |
| RWU                |               | 43-047-15166 | SWSW Section 24-T7S-R22E | \$18,000.00 Pending Permit                           |
| WV                 |               | 43-047-33987 | NENW Section 5-T8S-R22E  | \$18,000.00 UT20947-06158                            |
| RWU                | 33-30B        | 43-047-33790 | NWSE Section 30-T7S-R23E |  |
| RWU                | 11-30B        | 43-047-33785 | NWNW Section 30-T7S-R23E | \$18,000.00 UT2928-04650                             |
| RWU                | 13-20B        | 43-047-33498 | NWSW Section 20-T7S-R23E | \$18,000.00 UT2929-04658                             |
| RWU                | 33-20B        | 43-047-33500 | NWSE Section 20-175-R23E | \$18,000.00 UT2896-04605                             |
| RWU                | 33-19B        | 43-047-33499 | NWSE Section 19-T7S-R23E | \$18,000.00 UT2895-04609                             |
| RWU                | 13-19B        | 43-047-33497 | NWSW Section 19-175-R23E | \$18,000.00 UT2903-04611                             |
| RWU                | 11-20B        | 43-047-33553 | NWNW Section 20-T7S-R23E | \$18,000.00 UT2897-04606                             |
| RWU                | 11-19B        | 43-047-33552 | NWNW Section 19-T7S-R23E | \$18,000.00 UT2894-04603<br>\$18,000.00 UT2902-04610 |
| RWU                | 34-24A        | 43-047-33567 | SWSE Section 24-T75-R22E | \$18,000.00 UT2898-04607                             |
| RWU                | 11-25A        | 43-047-33574 | NWNW Section 25-T7S-R22E | \$18,000.00 UT2900-04609                             |
| RWU                | 31-25A        | 43-047-33577 | NWNE Section 25-T7S-R22E | \$18,000.00 UT2899-04608                             |
| RWU                | 33-25A        | 43-047-33578 | NWSE Section 25-T7S-R22E | \$18,000.00 UT2904-04612                             |
| RWU                | 31-19B        | 43-047-33555 | NWNE Section 19-T7S-R23E | \$18,000.00 UT2911-04616                             |
| RWU                | 11-29B        | 43-047-33590 | NWNW Section 29-T7S-R23E | \$18,000.00 UT2915-04629                             |
| RWU                | 13-25A        | 43-047-33575 | NWSW Section 25-T7S-R22E | \$18,000.00 UT2925-04648                             |
| RWU                | 31-30B        | 43-047-33788 | NWNE Section 30-T7S-R23E | \$18,000.00 UT2926-04649                             |
| RWU                | 34-13A        | 43-047-33593 | SWSE Section 13-T7S-R22E | \$18,000.00 UT2922-04643                             |
| RWU                | 12-24A        | 43-047-33591 | SWNW Section 24-T7S-R22E | \$18,000.00 UT2921-04642                             |
| RWU                | 88 (23-18B)   | 43-047-15210 | NESW Section 18-T7S-R23E | \$18,000.00 UT2000-02404                             |
| RWU                |               | 43-047-15221 | SENE Section 24-T7S-R22E | \$18,000.00 UT2000-02406                             |
| RWU                |               | 43-047-32739 | NESW Section 17-T7S-R23E | \$18,000.00 UT2835-04402                             |
| RWU                |               | 43-047-32982 | NESE Section 18-T7S-R23E | \$18,000.00 UT2833-04400                             |
| RWU                | 17 (41-20B)   | 43-047-15146 | NENE Section 17-T7S-R23E | \$18,000.00 UT2810-04346                             |
| RWU                | 2 (14-24B)    | 43-047-16472 | SWSW Section 24-T7S-R23E | \$18,000.00 UT2000-02416                             |
| RWU                | 6 (41-21B)    | 43-047-16482 | NENE Section 21-17S-R23E | \$18,000.00 UT2000-02426                             |
| RWU                |               | 43-047-15205 | NENE Section 27-T7S-R23E | \$18,000.00 UT2000-02417                             |
| RWU                | 11 (34-27B)   | 43-047-15142 | SWSE Section 27-T7S-R23E | \$18,000.00 UT2000-02395                             |
| RWU                | 14 (14-13B-L) | 43-047-15144 | SWSW Section 13-T7S-R23E | \$18,000.00 UT2000-02396                             |

Schedule A

| Well Name  | Number        | API Number   | Location                 | Bond Portion UIC Permit#                             |
|------------|---------------|--------------|--------------------------|--|
| RWU        | 23 (21-23B-L) | 43-047-15151 | NENW Section 23-T7S-R23E | \$18,000.00 UT2000-02397                             |
| RWU        |               | 43-047-16475 | NESW Section 23-T7S-R23E | \$18,000.00 UT2000-02420                             |
| RWU        | 34 (23-148-L) | 43-047-15161 | NWSW Section 14-T7S-R23E | \$18,000.00 UT2000-02398                             |
| RWU        | 48 (32-19B)   | 43-047-15174 | SWNE Section 19-T7S-R23E | \$18,000.00 UT2000-02399                             |
| RWU        | 52 (14-18B)   | 43-047-15178 | SWSW Section 18-T7S-R23E | \$18,000.00 UT2811-04347                             |
| RWU        | 56 (41-28B-L) | 43-047-15182 | NENE Section 28-T7S-R23E | \$18,000.00 UT2000-02400                             |
| RWU        | 59 (12-24B-L) | 43-047-16477 | SWNW Section 24-T7S-R23E | \$18,000.00 UT2000-02421                             |
| RWU        | 91 (33-22B)   | 43-047-16479 | NWSE Section 22-T7S-R23E | \$18,000.00 UT2000-02421                             |
| RWU        | 93 (43-27B)   | 43-047-16480 | NESE Section 27-T7S-R23E |  |
| RWU        | 97 (23-18C)   | 43-047-15216 | NESW Section 18-T7S-R24E | \$18,000.00 UT2000-02424                             |
| RWU        |               | 43-047-15261 | NWSW Section 22-17S-R23E | \$18,000.00 UT2000-02405                             |
| RWU        |               | 43-047-15263 | NWNE Section 22-T78-R23E | \$18,000.00 UT2000-02407                             |
| RWU        |               | 43-047-15267 | NESW Section 15-T7S-R23E | \$18,000.00 UT2000-02408                             |
| RWU        |               | 43-047-16496 | NENW Section 21-T75-R23E | \$18,000.00 UT2000-02409                             |
| RWU        |               | 43-047-15281 | NENW Section 20-T75-R23E | \$18,000.00 UT2000-02439                             |
| RWU        |               | 43-047-16497 | SWSW Section 21-T7S-R23E | \$18,000.00 UT2000-02411                             |
| RWU        |               | 43-047-15289 | NWSE Section 13-T7S-R23E | \$18,000.00 UT2000-02440                             |
| RWU        | 185 (41-14B)  | 43-047-16498 | NENE Section 14-T7S-R23E | \$18,000.00 UT2000-02412<br>\$18,000.00 UT2000-02441 |
| RWU        | 213 (41-33B)  | 43-047-20060 | NENE Section 33-T7S-R23E | \$18,000.00;UT2661-02444                             |
| RWU        | 264 (31-35B)  | 43-047-30519 | NWNE Section 35-T7S-R23E |  |
| RWU        |               | 43-047-32980 | NESE Section 17-T7S-R23E | \$18,000.00 UT2000-02449                             |
| RWU        | 271 (42-35B)  | 43-047-31081 | SENE Section 35-T7S-R23E | \$18,000.00 UT2832-04399                             |
| RWU        | 275 (31-26B-L |              | NWNE Section 26-T75-R23E | \$18,000.00 UT2000-02458                             |
| RWU        |               | 43-047-31052 | NWNW Section 36-T7S-R23E | \$18,000.00 UT2000-02455                             |
| RWU        |               | 43-047-30458 | SWSE Section 22-178-R22E | \$18,000.00 UT2000-02453                             |
| RWU        |               | 43-047-16478 | SWNW Section 27-T7S-R22E | \$18,000.00 UT2812-04348                             |
| RWU        | 100A (43-21A) |              | NESE Section 21-T7S-R22E | \$18,000.00 UT2000-02422                             |
| WU         | 199 (43-22A)  |              | NESE Section 22-T7S-R22E | \$18,000.00 UT2000-02463                             |
| ₹WÜ        |               | 43-047-30058 | NESE Section 28-T7S-R22E | \$18,000.00 UT2000-02414                             |
| <b>RWU</b> |               | 43-047-30103 | NENW Section 27-T7S-R22E | \$18,000.00 UT2918-02445                             |
| <b>WU</b>  |               | 43-047-16475 | NESE Section 28 T78-R23E | \$18,000.00 UT2000-02446                             |
| RWU        |               | 43-047-16485 | NENE Section 13-175-R23E | \$18,000.00 UT2000-02419                             |
| RWU        |               | 43-047-15271 | SWSW Section 20-17S-R23E | \$18,000.00 UT2000-02429                             |
| RWU        |               | 43-047-16495 | NENE Section 15-175-R23E | \$18,000.00 UT2000-02410                             |
| RWU        |               | 43-047-15303 | NENW Section 34-T7S-R23E | \$18,000.00 UT2000-02438                             |
| RWU        |               | 43-047-30518 | SESW Section 26-T7S-R23E | \$18,000.00 UT2000-02415<br>\$18,000.00 UT2000-02448 |

Schedule A

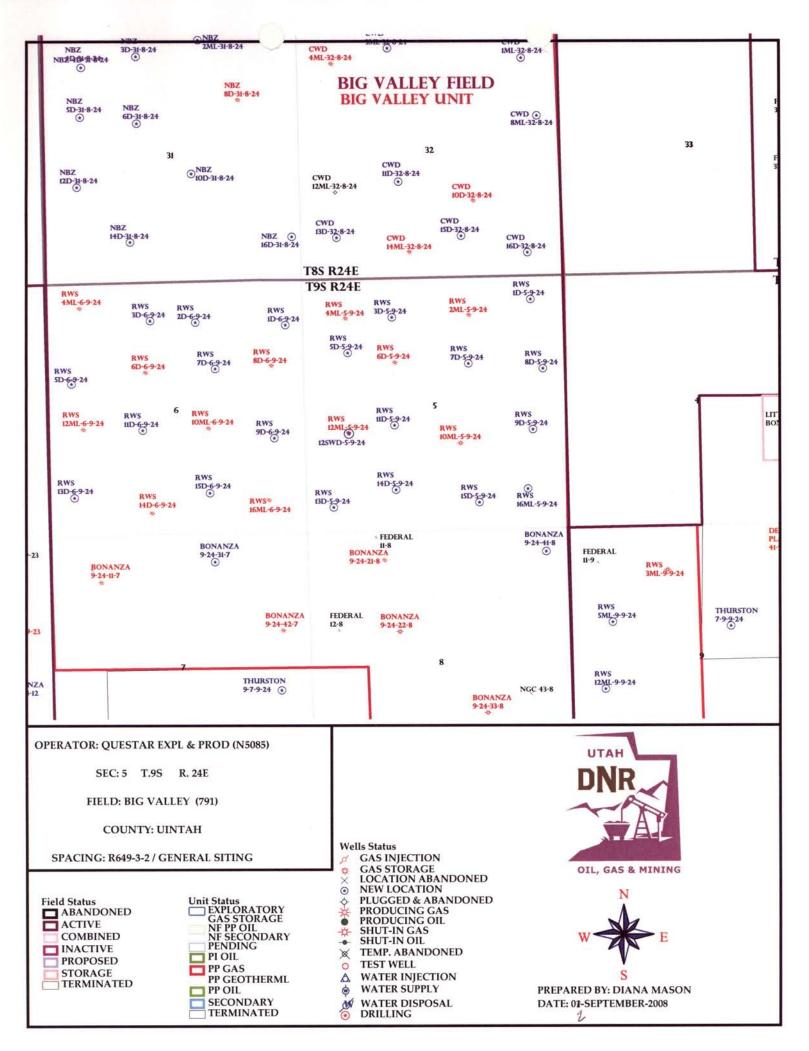
| Well Name         | Number       | API Number   | Location                 | Bond Portion UIC Permit#  |
|-------------------|--------------|--------------|--------------------------|---------------------------|
| RWU               | 265 (44-26B) | 43-047-30520 | SESE Section 26-T7S-R23E | \$18,000.00 UT2000-02450  |
| RWU               | 266 (33-26B) | 43-047-30521 | NWSE Section 26-T7S-R23E | \$18,000.00 UT2000-02451  |
| RWU               | 269 (13-26B) | 43-047-30522 | NWSW Section 26-T7S-R23E | \$18,000.00 UT2000-02452  |
| RWU               | 301 (43-15B) | 43-047-15205 | NESE Section 15-T7S-R23E | \$18,000.00 UT2834-04401  |
| Brennan Bottoms   | 5            | 43-047-15420 | SENW Section 18-T7S-R21E | \$18,000.00 UT2807-04341  |
| Brennan Bottoms   | 11           | 43-047-32772 | SESW Section 18-T7S-R21E | \$18,000.00 UT2807-04342  |
| WVU               | 7WRG-7-8-22  | 43-047-33503 | SWNE Section 7-T8S-R22E  | \$18,000.00 UT20945-06156 |
| WVU               | 120          | 43-047-32462 | NENW Section 22-T8S-R21E | \$18,000.00 UT2770-04264  |
| WYU               | 16           | 43-047-15447 | NENE Section 15-T8S-R21E | \$18,000.00 UT2000-02469  |
| WVU               | 21           | 43-047-15452 | NENE Section 16-T8S-R21E | \$18,000.00 UT2000-02471  |
| WVÜ               | 31           | 43-047-15460 | NENW Section 14-T8S-R21E | \$18,000.00 UT2000-02384  |
| WYU               | 36           | 43-047-15464 | NESW Section 10-T8S-R21E | \$18,000.00 UT2000-02479  |
| WVU               | 41           | 43-047-15469 | NENW Section 15-T8S-R21E | \$18,000.00 UT2000-02483  |
| WVU               | 50           | 43-047-15477 | SENE Section 15-T8S-R21E | \$18,000.00 UT2563-03504  |
| WVU               | 59           | 43-047-20018 | SWNW Section 14-T8S-R21E | \$18,000.00 UT2564-03505  |
| WVU               | 60           | 43-047-20019 | SWSE Section 15-T8S-R21E | \$18,000.00 UT2565-03506  |
| ŴVÜ               | 67           | 43-047-20043 | NESW Section 15-T8S-R21E | \$18,000.00 UT2000-02497  |
| WVU               | 68 '         | 43-047-20047 | NESE Section 15-T8S-R21E | \$18,000.00 UT2000-02498  |
| WVU               | 72           | 43-047-20058 | SWSW Section 16-T8S-R21E | \$18,000.00 UT2000-02501  |
| WVU               | 73           | 43-047-20066 | NESE Section 16-T8S-R21E | \$18,000.00 UT2000-02502  |
| WVU               | 78           | 43-047-20115 | NESW Section 16-T8S-R21E | \$18,000.00 UT2000-02504  |
| WVU               | 126          | 43-047-30796 | NWNE Section 21-T8S-R21E | \$18,000.00 UT2000-02509  |
| WVU               | 140          | 43-047-31707 | NWNW Section 15-T8S-R21E | \$18,000.00 UT2567-03508  |
| WVU               | 143          | 43-047-31808 | NWSE Section 10-T8S-R21E | \$18,000.00 UT2568-03509  |
| WVU               | 28-2         | 43-047-31524 | NESW Section 11-T8S-R21E | \$18,000.00 UT2000-02510  |
| WVU               | 40-2         | 43-047-31798 | NESE Section 10-T8S-R21E | \$18,000.00 UT2000-02511  |
| WVU               | 71-2         | 43-047-32449 | SWSW Section 15-T8S-R21E | \$18,000.00 UT2712-03777  |
| WVU               | 35           | 43-047-15483 | NESW Section 14-T8S-R21E | \$18,000.00 UT2813-04351  |
| WVU               | 97           | 43-047-30014 | NWSW Section 11-T8S-R21E | \$18,000.00 UT2814-04350  |
| Costas Fed        | 1-20-4B      | 43-047-31006 | NESW Section 20-T8S-R21E | \$18,000.00 UT2726-03792  |
| Costas Fed        | 2-20-3B      | 43-047-31066 | NESE Section 20-T8S-R21E | \$18,000.00 UT2634-03722  |
| Costas Fed        | 3-21-1D      | 43-047-31604 | SWNW Section 21-T8S-R21E | \$18,000.00 UT2540-02714  |
| Gypsum Hills Unit | 3            | 43-047-20002 | NENE Section 20-T8S-R21E | \$18,000.00 UT2759-04241  |
| Gypsum Hills Unit | 6            | 43-047-30099 | NENW Section 20-T8S-R21E | \$18,000.00 UT2760-04242  |
| Gypsum Hills Unit | 8            | 43-047-31932 | SWNE Section 20-T8S-R21E | \$18,000.00 UT2541-02715  |
| Gypsum Hills Unit | 10           | 43-047-32306 | NWSE Section 21-T8S-R20E | \$18,000.00 UT2632-03721  |

Schedule A

| Well Name         | Number     | API Number   | Location                 | Bond Portion UIC Permit# |
|-------------------|------------|--------------|--------------------------|--------------------------|
| Gypsum Hills Unit | 12         | 43-047-32458 | NESE Section 19-T8S-R21E | \$18,000.00 UT2727-03794 |
| Gypsum Hills Unit | 15         | 43-047-32648 | SWSW Section 20-T8S-R21E | \$18,000.00 UT2804-04336 |
| Gypsum Hills Unit | 17         | 43-047-32649 | SWSE Section 20-T8S-R21E | \$18,000.00 UT2805-04337 |
| Glen Bench        | 6-16-8-22  | 43-047-32549 | SENW Section 16-T8S-R22E | \$18,000.00 UT2878-04539 |
| Glen Bench        | 15-19-8-22 | 43-047-32756 | SWSE Section 19-T8S-R22E | \$18,000.00 UT2806-04338 |
| Glen Bench        | 7-16-8-22  | 43-047-32582 | SWNE Section 16-T8S-R22E | \$18,000.00 UT2803-04335 |
| Glen Bench        | 22-20-8-22 | 43-047-31356 | SENW Section 20-T8S-R22E | \$18,000.00 UT2755-04235 |
| Glen Bench        | 12-16-8-22 | 43-047-32583 | NWSW Section 16-T85-R22E | \$18,000.00 UT2765-04248 |
| Total 116         |            |              |                          | \$2,088,000.00           |

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

| APD RECEIVED: 08/25/2008   | API NO. ASS                               | SIGNED: 43-047     | -40341       |
|--|---|--------------------|--------------|
| WELL NAME: 12SWD-5-9-24  OPERATOR: QUESTAR EXPLORATION & ( N5085 )  CONTACT: RICK CANTERBURY | PHONE NUMBER                              | : 435-781-4362     | 2            |
| PROPOSED LOCATION:   | INSPECT LOCA                              | ATN BY: /          | /            |
| NWSW 05 090S 240E  | Tech Review                               | Initials           | Date         |
| SURFACE: 2033 FSL 0859 FWL BOTTOM: 2033 FSL 0859 FWL   | Engineering                               |                    |              |
| COUNTY: UINTAH   | Geology                                   |                    |              |
| LATITUDE: 40.06319 LONGITUDE: -109.2437  UTM SURF EASTINGS: 649789 NORTHINGS: 4436           | Surface                                   |                    |              |
| FIELD NAME: BIG VALLEY ( 791   |   |                    |              |
| LEASE TYPE: 1 - Federal  LEASE NUMBER: UTU-73456  SURFACE OWNER: 1 - Federal                 | PROPOSED FOR<br>COALBED METH              |                    | V            |
| RECEIVED AND/OR REVIEWED:  | LOCATION AND SITING                       | <b>3:</b>          |              |
| Plat  Bond: Fed[1] Ind[] Sta[] Fee[]  (No. ESB000024 )  Potash (Y/N)                         | R649-2-3. Unit: BIG VALLEY  R649-3-2. Gen | neral              |              |
| Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit (No. 49-2153)                           | R649-3-3. Exc                             | n Qtr/Qtr & 920' B | etween Wells |
| RDCC Review (Y/N)  | Drilling Unit Board Cause 1               | No:                |              |
| (Date: )  Whater Fee Surf Agreement (Y/N)  | Eff Date:                                 |                    |              |
| Intent to Commingle (Y/N)  |   | irectional Dri     | 11           |
| COMMENTS:  |   |                    |              |
| STIPULATIONS: 1 Lede 2 Spa   | ang Shr                                   |                    |              |
|  |   |                    |              |



## **United States Department of the Interior**

# BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160

(UT-922)

September 4, 2008

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2008 Plan of Development Big Valley Unit, Uintah County,

Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following salt water disposal well is planned for calendar year 2008 within the Big Valley, Uintah County, Utah.

API#

WELL NAME

LOCATION

(Proposed DZ Bird's Nest)

43-047-40341 12SWD-5-9-24 Sec 05 T09S R24E 2033 FSL 0859 FWL

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc:

File - Big Valley Unit

Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:9-4-08



# State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

September 8, 2008

Questar Exploration & Production Company 11002 E 17500 S Vernal, UT 84078

Re:

12SWD-5-9-24 Well, 2033' FSL, 859' FWL, NW SW, Sec. 5, T. 9 South, R. 24 East,

Uintah County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40341.

Sincerely,

Gil Hunt

Associate Director

Hil Hut

pab Enclosures

cc:

Uintah County Assessor

Bureau of Land Management, Vernal Office



| Location: NW SW    | Sec. <u>5</u>                            | T. 9 South | <b>R.</b> 24 East_ |  |  |  |  |
|--------------------|--|------------|--------------------|--|--|--|--|
| Lease:             | UTU-73456                                |            |                    |  |  |  |  |
| API Number:        | 43-047-40341                             |            |                    |  |  |  |  |
| Well Name & Number | 12SWD-5-9-24                             |            |                    |  |  |  |  |
| Operator:          | Questar Exploration & Production Company |            |                    |  |  |  |  |

## **Conditions of Approval**

### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

## 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

## 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES   |   |  |                              |                | FORM 9                          |
|---|---|--|------------------------------|----------------|---------------------------------|
|   | 5.LEAS  | E DESIGNATION AND SERIAL NUMBER: 73456 |                              |                |                                 |
|   | RY NOTICES AND REPORT   |  | _                            | 6. IF I        | NDIAN, ALLOTTEE OR TRIBE NAME:  |
|   | sals to drill new wells, significantly deep<br>ugged wells, or to drill horizontal laterals |  |                              |                | Or CA AGREEMENT NAME:<br>ALLEY  |
| 1. TYPE OF WELL<br>Water Disposal Well  |   |  |                              |                | .L NAME and NUMBER:<br>D-5-9-24 |
| 2. NAME OF OPERATOR:<br>QUESTAR EXPLORATION & PR  | ODUCTION CO   |  |                              |                | NUMBER:<br>7403410000           |
| 3. ADDRESS OF OPERATOR:<br>11002 East 17500 South , Ve  | rnal, UT, 84078 435 78  | <b>Р</b><br>31-4362                    | PHONE NUMBER:<br>Ext         |                | D and POOL or WILDCAT:<br>ALLEY |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>2033 FSL 0859 FWL<br>QTR/QTR, SECTION, TOWNSHI | TO DANCE MEDIDIAN.  |  |                              | COUNT          | AH                              |
|   | 5 Township: 09.0S Range: 24.0E Meridia  | an: S                                  |                              | STATE:<br>UTAH |                                 |
| 11. CHE   | CK APPROPRIATE BOXES TO INDIC   | CATE NA                                | ATURE OF NOTICE, REPO        | RT, OR OT      | HER DATA                        |
| TYPE OF SUBMISSION  |   |  | TYPE OF ACTION               |                |                                 |
|   | ACIDIZE   |  | ALTER CASING                 |                | CASING REPAIR                   |
| Approximate date work will start:   | CHANGE TO PREVIOUS PLANS  |  | CHANGE TUBING                |                | CHANGE WELL NAME                |
| 9/8/2010  | CHANGE WELL STATUS  |  | COMMINGLE PRODUCING FORMATIO | NS _           | CONVERT WELL TYPE               |
| ☐ SUBSEQUENT REPORT   | ☐ DEEPEN  | F                                      | FRACTURE TREAT               |                | NEW CONSTRUCTION                |
| Date of Work Completion:  | OPERATOR CHANGE   | ☐ F                                    | PLUG AND ABANDON             |                | PLUG BACK                       |
|   | ☐ PRODUCTION START OR RESUME  | ☐ F                                    | RECLAMATION OF WELL SITE     |                | RECOMPLETE DIFFERENT FORMATION  |
| SPUD REPORT Date of Spud:   | ☐ REPERFORATE CURRENT FORMATION   | □ s                                    | SIDETRACK TO REPAIR WELL     |                | TEMPORARY ABANDON               |
|   | ☐ TUBING REPAIR   |  | VENT OR FLARE                |                | WATER DISPOSAL                  |
| DRILLING REPORT Report Date:  | ☐ WATER SHUTOFF   | □ s                                    | SI TA STATUS EXTENSION       | 1              | APD EXTENSION                   |
| керогі раце:  | ☐ WILDCAT WELL DETERMINATION  |  | OTHER                        | ОТН            | HER:                            |
| l .   | MPLETED OPERATIONS. Clearly show all  |  |                              |                | etc.                            |
|   | n and Production Company h<br>on for the APD on the above                                   |  |                              | r              | Approved by the                 |
| extensi   | of for the APD of the above   | : сари                                 | oned well.                   |                | Utah Division of                |
|   |   |  |                              |                | l, Gas and Mining               |
|   |   |  |                              |                | 0 1 00 2000                     |
|   |   |  |                              | Date:_         | September 09, 2009              |
|   |   |  |                              | Bv:            | Jacky Jill                      |
|   |   |  |                              |                |                                 |
|   |   |  |                              |                |                                 |
|   |   |  |                              |                |                                 |
|   |   |  |                              |                |                                 |
|   |   |  |                              |                |                                 |
|   |   |  |                              |                |                                 |
| NAME (PLEASE PRINT)<br>Jan Nelson   | <b>PHONE NUMB</b> 435 781-4331  | ER                                     | <b>TITLE</b> Permit Agent    |                |                                 |
| SIGNATURE<br>N/A  |   |  | <b>DATE</b> 9/8/2009         |                |                                 |



## The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

## Request for Permit Extension Validation Well Number 43047403410000

**API:** 43047403410000 **Well Name:** 12SWD-5-9-24

Location: 2033 FSL 0859 FWL QTR NWSW SEC 05 TWNP 090S RNG 240E MER S

Company Permit Issued to: QUESTAR EXPLORATION & PRODUCTION CO

**Date Original Permit Issued: 9/8/2008** 

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

| me revision. Following is a checklist of some items related to the application, which should be verified.   |
|---|
| <ul> <li>If located on private land, has the ownership changed, if so, has the surface agreement been<br/>updated? </li> <li>Yes </li> <li>No</li> </ul>                        |
| • Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?  Yes No                             |
| <ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?</li> <li>Yes</li> <li>No</li> </ul>      |
| • Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No  |
| • Has the approved source of water for drilling changed?   Yes  No  |
| • Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?   Yes  No |
| • Is bonding still in place, which covers this proposed well?   • Yes   • No Utah Division of Oil, Gas and Mining   |

**Signature:** Jan Nelson **Date:** 9/8/2009

Title: Permit Agent Representing: QUESTAR EXPLORATION & PRODUCTIO Pate: September 09, 2009

Bv:

# Division of Oil, Gas and Mining OPERATOR CHANGE WORKSHEET

(for state use only)

| ROUTING |
|---------|
| CDW     |

| _                     | Change of Operator (Well Sold)  |             |           |  |                                 | X - Operator Name Change |                |           |           |  |
|-----------------------|---|-------------|-----------|--|---------------------------------|--------------------------|----------------|-----------|-----------|--|
|                       | The operator of the well(s) listed below has chan   |             | 6/14/2010 |  |                                 |                          |                |           |           |  |
| FROM: (Old Operator): |   |             |           | TO: ( New Operator): N3700-QEP Energy Company 1050 17th St, Suite 500 Denver, CO 80265 |                                 |                          |                |           |           |  |
| Ph                    | one: 1 (303) 308-3048   |             |           |  | Phone: 1 (303)                  | 308-3048                 |                |           |           |  |
|                       | CA No.  |             |           |  | Unit:                           | 7500 5040                | BIG VA         | LLEV      |           |  |
| W                     | ELL NAME  | SEC         | TWN       | RNG  | API NO                          | ENTITY                   | LEASE TYPE     |           | WELL      |  |
| 12                    | SWD-5-9-24  |             |           | · · · · · · · · · · · · · · · · · · ·  |                                 | NO                       |                | TYPE      | STATUS    |  |
| 12                    | 3 W D-3-9-24  | 05          | 090S      | 240E   | 4304740341                      |                          | Federal        | WD        | APD       |  |
|                       |   |             |           |  | l                               |                          | <u> </u>       |           |           |  |
| O                     | PERATOR CHANGES DOCUMENT.   | ΔTI         | ON        |  |                                 |                          |                |           |           |  |
| En                    | ter date after each listed item is completed  |             | O14       |  |                                 |                          |                |           |           |  |
| 1.                    | (R649-8-10) Sundry or legal documentation wa  | s rece      | eived fr  | om the   | FORMER one                      | erator on                | 6/28/2010      |           |           |  |
| 2.                    | (R649-8-10) Sundry or legal documentation wa  | s rece      | eived fr  | om the   | NEW operator                    | on.                      | 6/28/2010      |           |           |  |
| 3.                    | The new company was checked on the Departm  | nent (      | of Con    | ımerce   | . Division of Co                | on.<br>Ornoration        | Database on:   |           | 6/24/2010 |  |
| 4a.                   | is the new operator registered in the State of U  | tah:        |           | E  | Business Numbe                  | r:                       | _764611-0143   |           | 6/24/2010 |  |
| эа.                   | (R649-9-2)Waste Management Plan has been red  | ceive       | d on:     |  | Requested                       |                          |                |           |           |  |
| 5b.                   | Inspections of LA PA state/fee well sites comple  | ete or      | ı:        |  | n/a                             | -                        |                |           |           |  |
| 6.                    | Reports current for Production/Disposition & St.  | ındrie      | es on:    |  | ok                              | •                        |                |           |           |  |
| 0.                    | Federal and Indian Lease Wells: The BL  | M and       | d or the  | BIA h  | as approved the                 |                          | me change,     |           |           |  |
| 7.                    | or operator change for all wells listed on Federa Federal and Indian Units:                     | I or li     | ndian l   | eases of   | n:                              | BLM                      | 8/16/2010      | BIA       | not yet   |  |
| •                     |   | ~ <b>6</b>  | •4        |  | 11 11                           |                          |                |           |           |  |
| 8.                    | The BLM or BIA has approved the successor Federal and Indian Communization Agr                  | or un       | n opera   | ator for   | wells listed on:                |                          | 8/16/2010      |           |           |  |
|                       | The BLM or BIA has approved the operator for  | or all      | velle i   | icted w  | ithim a CA arra                 |                          | 37/3           |           |           |  |
| 9.                    | Underground Injection Control ("UIC")   | л ан<br>Dix | vision    | isieu wi<br>hac an   | iuiin a CA on:<br>proved IIIC E | 5 T                      | N/A            |           |           |  |
|                       | Inject, for the enhanced/secondary recovery uni   | t/proi      | ect for   | the wa   | ter disposal wal                | Man listed a             |                |           |           |  |
| DA                    | TA ENTRY:   | a proj      | 000 101   | are wa   | ici disposal wei                | i(s) listed of           | n:<br>-        | 6/29/2010 |           |  |
| 1.                    | Changes entered in the Oil and Gas Database of  | n:          |           |  | 6/30/2010                       |                          |                |           |           |  |
| 2.                    | Changes have been entered on the Monthly Ope  | erato       | r Char    | -<br>ıge Spr   | ead Sheet on:                   |                          | 6/30/2010      |           |           |  |
| ٥.                    | Bond information entered in RBDMS on:   |             |           |  | 6/30/2010                       | •                        | 0.00,2010      |           |           |  |
|                       | Fee/State wells attached to bond in RBDMS on:   |             |           | _  | 6/30/2010                       |                          |                |           |           |  |
| 5.<br>6.              | Injection Projects to new operator in RBDMS or Receipt of Acceptance of Drilling Procedures for | 1:<br>A DI  | >/\tau    | _  | 6/30/2010                       |                          |                |           |           |  |
| BO                    | ND VERIFICATION:  | r API       | J/New     | on:  |                                 | n/a                      |                |           |           |  |
|                       | Federal well(s) covered by Bond Number:   |             |           |  | ECD000024                       |                          |                |           |           |  |
| 2.                    | Indian well(s) covered by Bond Number:  |             |           | -  | ESB000024<br>965010693          |                          |                |           |           |  |
| 3a.                   | (R649-3-1) The <b>NEW</b> operator of any state/fee   | well(       | s) liste  | d cover  | ed by Bond Nu                   | mber                     | 965010695      |           |           |  |
| 3b.                   | The FORMER operator has requested a release   | of lia      | bility f  | rom the  | eir bond on:                    | n/a                      | 702010073      |           |           |  |
| LE.                   | ASE INTEREST OWNER NOTIFICA   | TIC         | ON:       |  | _                               |                          |                |           |           |  |
| 4. (]                 | R649-2-10) The <b>NEW</b> operator of the fee wells h   | ıas be      | en con    | tacted a   | and informed by                 | a letter fro             | m the Division |           |           |  |
|                       | of their responsibility to notify all interest owners   | of th       | is chan   | ge on:   |                                 | n/a                      |                |           |           |  |
| <u> </u>              | MMENTS:   |             |           |  |                                 |                          |                |           |           |  |

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ON CAS AND MINING

| DIVISION OF OIL, GAS AND MINING   | LEASE DESIGNATION AND SERIAL NUMBER See attached   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| SUNDRY NOTICES AND REPORTS ON V   | VELLS I.   | IF INDIAN, ALLOTTEE OR TRIBE NAME:<br>See attached |  |  |  |  |  |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-<br>drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such  |  | UNIT OF CA AGREEMENT NAME:<br>See attached         |  |  |  |  |  |
| 1 TYPE OF WELL OIL WELL GAS WELL OTHER  | 8.   | WELL NAME and NUMBER:                              |  |  |  |  |  |
| Questar Exploration and Production Company N5085  | The state of the s | API NUMBER:  |  |  |  |  |  |
| 3 ADDRESS OF OPERATOR:<br>1050 17th Street, Suite 500 Denver STATE CO 212 80265   | PHONE NUMBER: 10.  | FIELD AND POOL, OR WILDCAT:                        |  |  |  |  |  |
| 4. LOCATION OF WELL  FOOTAGES AT SURFACE: See attached  |  | DUNTY: Attached                                    |  |  |  |  |  |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  |  | ATE: UTAH  |  |  |  |  |  |
| 11 CHECK APPROPRIATE BOXES TO INDICATE NATU   | JRE OF NOTICE REPORT   |  |  |  |  |  |  |
| TYPE OF SUBMISSION  | TYPE OF ACTION   | OROTHERDAIA  |  |  |  |  |  |
| NOTICE OF INTENT   ALTER CASING   FRACTURE TREAT   SIDETRACK TO REPAIR WELL   |  |  |  |  |  |  |  |
| employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:  Federal Bond Number: 965002976 (BLM Reference No. ESB000024)  Utah State Bond Number: 965003033  Fee Land Bond Number: 965003033  Fee Land Bond Number: 799446  965005033  The attached document is an all inclusive list of the wells operated by Questar Exploration and Production Company. As of June 14, 2010 QEP Energy Company assumes all rights, duties and obligations as operator of the properties as described on the list |  |  |  |  |  |  |  |
| NAME (PLEASE PRINT) Morgan Anderson  SIGNATURE OGAL And MA  | Regulatory Affairs Ar  DATE 6/23/2010  | nalyst   |  |  |  |  |  |
| This space for State use only)  |  |  |  |  |  |  |  |

This space for State use only)

RECEIVED

JUN 2 8 2010

DIV. OF OIL, GAS & MINING

UN 2 0 2010
(See Instructions on Reverse Side)

APPROVED 61301 2009
Carline Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician



## **United States Department of the Interior**



BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155 http://www.blm.gov/ut/st/en.html

IN REPLY REFER TO: 3100 (UT-922)

JUL 2 8 2010

Memorandum

To:

Vernal Field Office, Price Field Office, Moab Field Office Roja L Bankut

From:

Chief, Branch of Minerals

Subject:

Name Change Recognized

Attached is a copy of the Certificate of Name Change issued by the Texas Secretary of State and a decision letter recognizing the name change from the Eastern States Office. We have updated our records to reflect the name change in the attached list of leases.

The name change from Questar Exploration and Production Company into QEP Energy Company is effective June 8, 2010.

cc:

MMS

**UDOGM** 

AUG 1 6 2019

DIV. OF OIL, CAS A .....

## STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

|                             | TRANSFER OF AU                             | THORITY TO INJ                 | ECT                                    |
|-----------------------------|--|--------------------------------|--|
| Vell Name and<br>See Attach |  |                                | API Number<br>Attached                 |
| ocation of We               |  |                                | Field or Unit Name                     |
| Footage: /                  | Attached                                   | County :                       | Attached  Lease Designation and Number |
| QQ, Section                 | ı, Township, Range:                        | State: UTAH                    | Attached                               |
| EFFECTIVE                   | DATE OF TRANSFER: 6/14/2010                |                                |  |
| URRENT O                    | PERATOR                                    |                                |  |
| Company:                    | Questar Exploration and Production Company | Name: <u>A</u>                 | nn Petrik                              |
| Address:                    | 1050 17th Street, Suite 500                | Signature:                     |  |
|                             | city Denver state CO zip 80265             | Title:                         | ngineering Analyst                     |
| Phone:                      | (303) 672-6900                             | Date:                          | 28/2010                                |
| Comments                    | <b>5</b> :                                 |                                |  |
| EW OPERA                    | TOR  |                                |  |
| Company:                    | QEP Energy Company                         | _ Name: 🗡                      | nn Petrik                              |
| Address:                    | 1050 17th Street, Suite 500                | _ Signature:                   | Town                                   |
|                             | city Denver state CO zip 80265             | _ Title: (\frac{\mathbb{E}}{E} | ngineering Analyst                     |
| Phone:                      | (303) 672-6900                             | Date: <u>6</u>                 | /28/201d                               |
|                             | :  |                                | -                                      |
| Comments                    |  |                                |  |
| Comments                    |  |                                |  |

Transfer approved by:

Comments:

Title:

Accepted by the Utah Division of Oil, Gas and Mining

Approval Date: \_

EPA approved well

RECEIVED JUN 2 8 2010

|  | STATE OF UTAH  |  | FORM 9                                     |  |
|--|--|--|--|--|
| DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING   |  | 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-73456                               |  |  |
| SUNDRY NOTICES AND REPORTS ON WELLS  |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  |  |  |
| Do not use this form for propo<br>bottom-hole depth, reenter plu<br>DRILL form for such proposals  | sals to drill new wells, significantly deepen<br>ugged wells, or to drill horizontal laterals. U | existing wells below current se APPLICATION FOR PERMIT TO                      | 7.UNIT or CA AGREEMENT NAME:<br>BIG VALLEY |  |
| 1. TYPE OF WELL<br>Water Disposal Well   |  |  | 8. WELL NAME and NUMBER:<br>12SWD-5-9-24   |  |
| 2. NAME OF OPERATOR:<br>QEP ENERGY COMPANY   |  |  | 9. API NUMBER:<br>43047403410000           |  |
| 3. ADDRESS OF OPERATOR:<br>11002 East 17500 South , Vei  |  | <b>NE NUMBER:</b><br>1068 Ext  | 9. FIELD and POOL or WILDCAT: BIG VALLEY   |  |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>2033 FSL 0859 FWL   | TO DANCE MEDIDIAN.   |  | COUNTY:<br>UINTAH                          |  |
| QTR/QTR, SECTION, TOWNSHI<br>Qtr/Qtr: NWSW Section: 0!   | 5 Township: 09.0S Range: 24.0E Meridian:   | S  | STATE:<br>UTAH                             |  |
| CHE  | CK APPROPRIATE BOXES TO INDICAT  | E NATURE OF NOTICE, REPORT,  | OR OTHER DATA                              |  |
| TYPE OF SUBMISSION   |  | TYPE OF ACTION   |  |  |
|  | ☐ ACIDIZE  | ☐ ALTER CASING   | ☐ CASING REPAIR                            |  |
| NOTICE OF INTENT Approximate date work will start: 9/8/2011  | CHANGE TO PREVIOUS PLANS   | CHANGE TUBING  | CHANGE WELL NAME                           |  |
| SUBSEQUENT REPORT  | ☐ CHANGE WELL STATUS ☐ DEEPEN  | <ul> <li>☐ COMMINGLE PRODUCING FORMATIONS</li> <li>☐ FRACTURE TREAT</li> </ul> | ☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION     |  |
| Date of Work Completion:   | OPERATOR CHANGE  | PLUG AND ABANDON   | ☐ PLUG BACK                                |  |
| SPUD REPORT  | PRODUCTION START OR RESUME   | RECLAMATION OF WELL SITE   | ☐ RECOMPLETE DIFFERENT FORMATION           |  |
| Date of Spud:  | REPERFORATE CURRENT FORMATION  | SIDETRACK TO REPAIR WELL   | TEMPORARY ABANDON                          |  |
| _  | ☐ TUBING REPAIR  |  | ☐ WATER DISPOSAL                           |  |
| DRILLING REPORT Report Date:   | WATER SHUTOFF  | SI TA STATUS EXTENSION   | ✓ APD EXTENSION                            |  |
|  | ☐ WILDCAT WELL DETERMINATION   | OTHER  | OTHER:                                     |  |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  QEP ENERGY COMPANY HEREBY REQUESTS A ONE YEAR EXTENSION FOR THE  APD ON THE ABOVE CAPTIONED WELL.  Approved by the  Utah Division of  Oil, Gas and Mining  Date: September 09, 2010  By: |  |  |  |  |
|  |  |  |  |  |
| NAME (PLEASE PRINT) Jan Nelson   | <b>PHONE NUMBER</b> 435 781-4331   | TITLE<br>Permit Agent  |  |  |
| SIGNATURE<br>N/A   |  | <b>DATE</b> 9/7/2010   |  |  |



## The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

## Request for Permit Extension Validation Well Number 43047403410000

**API:** 43047403410000 **Well Name:** 12SWD-5-9-24

Location: 2033 FSL 0859 FWL QTR NWSW SEC 05 TWNP 090S RNG 240E MER S

Company Permit Issued to: QEP ENERGY COMPANY

**Date Original Permit Issued: 9/8/2008** 

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

| me revision. Following is a checklist of some items related to the application, which should be verified.  |
|--|
| <ul> <li>If located on private land, has the ownership changed, if so, has the surface agreement been<br/>updated?</li> <li>Yes</li> <li>No</li> </ul>   |
| <ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or<br/>siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>                           |
| <ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?</li> <li>Yes</li> <li>No</li> </ul>   |
| <ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could<br/>affect the proposed location?</li> <li>Yes</li> <li>No</li> </ul>                                     |
| • Has the approved source of water for drilling changed?   Yes  No   |
| <ul> <li>Have there been any physical changes to the surface location or access route which will require a<br/>change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul> |
| • Is bonding still in place, which covers this proposed well?   • Yes   Oil, Gas and Mining  |

**Signature:** Jan Nelson **Date:** 9/7/2010

Title: Permit Agent Representing: QEP ENERGY COMPANY

**Date:** September 09, 2010

Bv:

Sundry Number: 18149 API Well Number: 43047403410000

|  | STATE OF UTAH   |   | FORM 9                                   |  |
|--|---|---|--|--|
| DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING   |   | <b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-73456 |  |  |
| SUND   | RY NOTICES AND REPORTS  | ON WELLS  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:    |  |
|  | sals to drill new wells, significantly deepen or<br>gged wells, or to drill horizontal laterals. Us |   | 7.UNIT OF CA AGREEMENT NAME: BIG VALLEY  |  |
| 1. TYPE OF WELL<br>Water Disposal Well   |   |   | 8. WELL NAME and NUMBER:<br>12SWD-5-9-24 |  |
| 2. NAME OF OPERATOR:<br>QEP ENERGY COMPANY   |   |   | 9. API NUMBER:<br>43047403410000         |  |
| 3. ADDRESS OF OPERATOR:<br>11002 East 17500 South , Ver  |   | <b>E NUMBER:</b><br>068 Ext                             | 9. FIELD and POOL or WILDCAT: BIG VALLEY |  |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>2033 FSL 0859 FWL   | TO DANCE MEDICALL   |   | COUNTY:<br>UINTAH                        |  |
| QTR/QTR, SECTION, TOWNSHI<br>Qtr/Qtr: NWSW Section: 05   | p, RANGE, MERIDIAN:<br>5 Township: 09.0S Range: 24.0E Meridian:                                     | S   | STATE:<br>UTAH                           |  |
| 11.<br>CHE   | CK APPROPRIATE BOXES TO INDICATI  | E NATURE OF NOTICE, REPORT                              | , OR OTHER DATA                          |  |
| TYPE OF SUBMISSION   |   | TYPE OF ACTION  |  |  |
|  | ☐ ACIDIZE   | ALTER CASING  | CASING REPAIR                            |  |
| Approximate date work will start:  | ☐ CHANGE TO PREVIOUS PLANS  | CHANGE TUBING   | ☐ CHANGE WELL NAME                       |  |
| 9/8/2012   | ☐ CHANGE WELL STATUS  | ☐ COMMINGLE PRODUCING FORMATIONS                        | ☐ CONVERT WELL TYPE                      |  |
| SUBSEQUENT REPORT  | ☐ DEEPEN  | FRACTURE TREAT  | ☐ NEW CONSTRUCTION                       |  |
| Date of Work Completion:   | OPERATOR CHANGE   | ☐ PLUG AND ABANDON                                      | PLUG BACK                                |  |
| _  | ☐ PRODUCTION START OR RESUME  | RECLAMATION OF WELL SITE                                | RECOMPLETE DIFFERENT FORMATION           |  |
| SPUD REPORT Date of Spud:  | REPERFORATE CURRENT FORMATION   | SIDETRACK TO REPAIR WELL                                | TEMPORARY ABANDON                        |  |
|  | ☐ TUBING REPAIR   | VENT OR FLARE   | WATER DISPOSAL                           |  |
| ☐ DRILLING REPORT  | ☐ WATER SHUTOFF   | SI TA STATUS EXTENSION                                  | ✓ APD EXTENSION                          |  |
| Report Date:   | □ WILDCAT WELL DETERMINATION  | OTHER   | OTHER:                                   |  |
| 13 DESCRIPE PROPOSED OR CO   |   |   |  |  |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  QEP ENERGY COMPANY HEREBY REQUESTS A ONE YEAR EXTENSION FOR THE  APD ON THE ABOVE CAPTIONED WELL.  Approved by the  Utah Division of Oil, Gas and Mining |   |   |  |  |
|  |   | -   | 09/07/2011                               |  |
|  |   |   | Date: 07/01/2011                         |  |
|  |   | E   | By: Dolly July                           |  |
|  |   |   | <b>3</b> 0                               |  |
|  |   |   |  |  |
|  |   |   |  |  |
|  |   |   |  |  |
|  |   |   |  |  |
| NAME (PLEASE PRINT) Valyn Davis  | PHONE NUMBER  | TITLE Regulatory Affairs Analyst                        |  |  |
| SIGNATURE  | 435 781-4369  | DATE  |  |  |
| N/A  |   | 9/6/2011  |  |  |

Sundry Number: 18149 API Well Number: 43047403410000



## The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

## Request for Permit Extension Validation Well Number 43047403410000

**API:** 43047403410000 **Well Name:** 12SWD-5-9-24

Location: 2033 FSL 0859 FWL QTR NWSW SEC 05 TWNP 090S RNG 240E MER S

Company Permit Issued to: QEP ENERGY COMPANY

**Date Original Permit Issued: 9/8/2008** 

**Signature:** Valyn Davis

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

| <ul> <li>If located on private land, has the ownership changed, if so, has the surface agreement been updated?</li> <li>Yes</li> <li>No</li> </ul>   |
|--|
| <ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or<br/>siting requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>                           |
| <ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation<br/>of this proposed well?</li> <li>Yes</li> <li>No</li> </ul>                                       |
| <ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could<br/>affect the proposed location?</li> <li>Yes</li> <li>No</li> </ul>                                     |
| • Has the approved source of water for drilling changed? 🔵 Yes 📵 No  |
| <ul> <li>Have there been any physical changes to the surface location or access route which will require a<br/>change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul> |
| • Is bonding still in place, which covers this proposed well?   Yes   No   |
|  |

**Date:** 9/6/2011

Title: Regulatory Affairs Analyst Representing: QEP ENERGY COMPANY

Form 3160-5 (August 2007)

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

JAN 0 9 2012

FORM APPROVED OMB NO. 1004-0135

|             | expires: | July | 31, |
|-------------|----------|------|-----|
| Lease Seria | No.      |      |     |
|             | _        |      |     |

#### SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-entergang UTU73456 6. If Indian, Allottee or Tribe Name abandoned well. Use form 3160-3 (APD) for such proposals If Unit or CA/Agreement, Name and/or No. SUBMIT IN TRIPLICATE - Other instructions on reverse side. UTU81308C Well Name and No. RWS 12SWD-5-9-24 Type of Well **UNKNOWN OTH** 🗖 Oil Well 🔲 Gas Well 🔀 Other: Name of Operator QEP ENERGY COMPANY Contact: VALYN DAVIS 9. API Well No. 43-047-40341-00-X1 E-Mail: Valyn.Davis@qepres.com 10. Field and Pool, or Exploratory 3b. Phone No. (include area code) Ph: 435-781-4369 11002 EAST 17500 SOUTH RED WASH VERNAL, UT 84078 Fx: 435-781-4395 11. County or Parish, and State 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 5 T9S R24E NWSW 2033FSL 859FWL UINTAH COUNTY, UT 40.063322 N Lat, 109.244344 W Lon 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF ACTION TYPE OF SUBMISSION ☐ Water Shut-Off ☐ Production (Start/Resume) □ Acidize □ Deepen Notice of Intent ■ Well Integrity ☐ Alter Casing ☐ Fracture Treat □ Reclamation ☐ Subsequent Report Other $\hfill\square$ New Construction Other Change to Original Casing Repair Recomplete ☐ Change Plans ☐ Temporarily Abandon Final Abandonment Notice □ Plug and Abandon ■ Water Disposal Convert to Injection Plug Back 13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.) determined that the site is ready for final inspection.) QEP ENERGY COMPANY HEREBY REQUESTS A TWO YEAR EXTENSION FOR THE APD ON THE ABOVE CAPTIONED WELL. BLM APPROVAL DATE: 1/11/2010 VERNAL FIELD OFFICE RECEIVED FEB 1 5 2012 CONDITIONS OF APPROVAL ATTACHED PET DIV. OF OIL, GAS & MINING 14. I hereby certify that the foregoing is true and correct. Electronic Submission #127586 verified by the BLM Well Information System For QEP ENERGY COMPANY, sent to the Vernal Committed to AFMSS for processing by ROBIN R. HANSEN on 01/27/2012 (12RRH1455SE) REGULATORY AFFAIRS ANALYST Name (Printed/Typed) VALYN DAVIS 01/09/2012 Date (Electronic Submission) Signature THIS SPACE FOR FEDERAL OR STATE OFFICE USE Assistant Field Manager

Title

Lands & Mineral Resources

Approved By Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds regal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

**VERNAL FIELD OFFICE** 

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## **CONDITIONS OF APPROVAL**

## **QEP ENERGY COMPANY**

## **Notice of Intent APD Extension**

Lease:

UTU-73456

Well:

RWS 12SWD-5-9-24

Location:

NWSW Sec 5-T9S-R24E

An extension for the referenced APD is granted as requested with the following conditions:

- 1. The extension and APD shall expire on 01-11-2014.
- 2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Robin L Hansen of this office at (435) 781-2777

Sundry Number: 29809 API Well Number: 43047403410000

| STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCES  DIVISION OF OIL, GAS, AND MINING |  | FORM 9   |   |  |
|--|--|--|---|--|
|  |  | 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-73456 |   |  |
| SUNDRY NOTICES AND REPORTS ON WELLS  |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:            |   |  |
|  | posals to drill new wells, significantly deep<br>reenter plugged wells, or to drill horizontal I<br>n for such proposals.                                      |  | 7.UNIT or CA AGREEMENT NAME:<br>BIG VALLEY  |  |
| 1. TYPE OF WELL<br>Water Disposal Well   |  |  | 8. WELL NAME and NUMBER:<br>12SWD-5-9-24  |  |
| 2. NAME OF OPERATOR:<br>QEP ENERGY COMPANY                                       |  |  | <b>9. API NUMBER:</b> 43047403410000  |  |
| 3. ADDRESS OF OPERATOR:<br>11002 East 17500 South ,                              |  | NE NUMBER:<br>-3068 Ext                          | 9. FIELD and POOL or WILDCAT:<br>BIG VALLEY   |  |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>2033 FSL 0859 FWL                 |  |  | COUNTY:<br>UINTAH   |  |
| QTR/QTR, SECTION, TOWNSH   | <b>IIP, RANGE, MERIDIAN:</b><br>05 Township: 09.0S Range: 24.0E Meridian:  | S  | STATE:<br>UTAH  |  |
| 11. CHECI  | K APPROPRIATE BOXES TO INDICATE N  | ATURE OF NOTICE, REPOR                           | T, OR OTHER DATA  |  |
| TYPE OF SUBMISSION   |  | TYPE OF ACTION                                   |   |  |
| QEP ENERGY COMPA   | CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR  WATER SHUTOFF | EAR EXTENSION FOR                                | CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  ✓ APD EXTENSION  OTHER:  Pepths, volumes, etc.  Approved by the Utah Division of Oil, Gas and Mining  Date: September 13, 2012  By: |  |
| NAME (PLEASE PRINT)  | PHONE NUMBER   | TITLE  |   |  |
| Valyn Davis  | 435 781-4369   | Regulatory Affairs Analyst                       |   |  |
| SIGNATURE<br>N/A   |  | <b>DATE</b><br>9/6/2012                          |   |  |

Sundry Number: 29809 API Well Number: 43047403410000



## The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

## Request for Permit Extension Validation Well Number 43047403410000

API: 43047403410000 Well Name: 12SWD-5-9-24

Location: 2033 FSL 0859 FWL QTR NWSW SEC 05 TWNP 090S RNG 240E MER S

Company Permit Issued to: QEP ENERGY COMPANY

Date Original Permit Issued: 9/8/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

| • If located on private land, has the ownership changed, if so, has the surface agreement been updated?<br>Yes No  |    |
|--|----|
| <ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting<br/>requirements for this location?</li> <li>Yes</li> <li>No</li> </ul>                           |    |
| <ul> <li>Has there been any unit or other agreements put in place that could affect the permitting or operation of the proposed well?</li> <li>Yes</li> <li>No</li> </ul>  | is |
| • Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes  No   | he |
| • Has the approved source of water for drilling changed?   Yes  No   |    |
| <ul> <li>Have there been any physical changes to the surface location or access route which will require a change in<br/>plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul> |    |
| • Is bonding still in place, which covers this proposed well?   Yes   No   |    |
| nature: Valvn Davis Date: 9/6/2012   |    |

Sig

Title: Regulatory Affairs Analyst Representing: QEP ENERGY COMPANY

Sundry Number: 42330 API Well Number: 43047403410000

|  | STATE OF UTAH  |  | FORM 9  |  |
|--|--|--|---|--|
| DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING |  | 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-73456 |   |  |
| SUNDRY NOTICES AND REPORTS ON WELLS                              |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:            |   |  |
|  | oposals to drill new wells, significantly de<br>reenter plugged wells, or to drill horizont<br>n for such proposals. |  | 7.UNIT or CA AGREEMENT NAME:<br>BIG VALLEY  |  |
| 1. TYPE OF WELL<br>Water Disposal Well                           |  |  | 8. WELL NAME and NUMBER:<br>12SWD-5-9-24  |  |
| 2. NAME OF OPERATOR:<br>QEP ENERGY COMPANY                       |  |  | 9. API NUMBER:<br>43047403410000  |  |
| 3. ADDRESS OF OPERATOR:<br>11002 East 17500 South,               |  | HONE NUMBER:<br>08-3068 Ext                      | 9. FIELD and POOL or WILDCAT:<br>BIG VALLEY   |  |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>2033 FSL 0859 FWL |  |  | COUNTY:<br>UINTAH   |  |
| QTR/QTR, SECTION, TOWNS  | HIP, RANGE, MERIDIAN:<br>05 Township: 09.0S Range: 24.0E Meridia   | an: S  | STATE:<br>UTAH  |  |
| 11. CHEC   | K APPROPRIATE BOXES TO INDICATE  | NATURE OF NOTICE, REPOR                          | RT, OR OTHER DATA   |  |
| TYPE OF SUBMISSION   |  | TYPE OF ACTION                                   |   |  |
| ✓ NOTICE OF INTENT   | ACIDIZE  | ALTER CASING                                     | CASING REPAIR   |  |
| Approximate date work will start: 9/8/2014                       | CHANGE TO PREVIOUS PLANS   | CHANGE TUBING                                    | CHANGE WELL NAME  |  |
| 9/0/2014   | CHANGE WELL STATUS   | COMMINGLE PRODUCING FORMATIONS                   | CONVERT WELL TYPE   |  |
| SUBSEQUENT REPORT Date of Work Completion:                       | DEEPEN   | FRACTURE TREAT                                   | NEW CONSTRUCTION  |  |
|  | OPERATOR CHANGE  | PLUG AND ABANDON                                 | PLUG BACK   |  |
| SPUD REPORT  | PRODUCTION START OR RESUME   | RECLAMATION OF WELL SITE                         | RECOMPLETE DIFFERENT FORMATION  |  |
| Date of Spud:  | REPERFORATE CURRENT FORMATION  | SIDETRACK TO REPAIR WELL                         | TEMPORARY ABANDON   |  |
| _  | TUBING REPAIR  | VENT OR FLARE                                    | WATER DISPOSAL  |  |
| DRILLING REPORT Report Date:                                     | WATER SHUTOFF  | SI TA STATUS EXTENSION                           | APD EXTENSION   |  |
|  | WILDCAT WELL DETERMINATION   | OTHER  | OTHER:  |  |
| QEP ENERGY COMPA   | COMPLETED OPERATIONS. Clearly show all<br>ANY HEREBY REQUESTS A ONE<br>APD ON THE ABOVE CAPTIONE                     | YEAR EXTENSION FOR                               | Approved by the Utah Division of Oil, Gas and Mining  Date: September 12, 2013  By: |  |
| NAME (PLEASE PRINT)  | PHONE NUMBER   | R   TITLE  |   |  |
| Valyn Davis  | 435 781-4369   | Regulatory Affairs Analyst                       |   |  |
| SIGNATURE<br>N/A   |  | <b>DATE</b> 9/5/2013                             |   |  |

Sundry Number: 42330 API Well Number: 43047403410000



## The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

## Request for Permit Extension Validation Well Number 43047403410000

API: 43047403410000 Well Name: 12SWD-5-9-24

Location: 2033 FSL 0859 FWL QTR NWSW SEC 05 TWNP 090S RNG 240E MER S

Company Permit Issued to: QEP ENERGY COMPANY

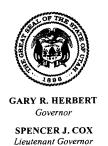
**Date Original Permit Issued: 9/8/2008** 

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

| • If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No   |
|--|
| <ul> <li>Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting<br/>requirements for this location?</li> <li>Yes</li> <li>No</li> </ul> |
| • Has there been any unit or other agreements put in place that could affect the permitting or operation of thi proposed well?  Yes No   |
| • Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ( Yes ( No   |
| • Has the approved source of water for drilling changed?   Yes  No   |
| • Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?   Yes  No            |
| • Is bonding still in place, which covers this proposed well?   Yes   No   |
| nature: Valyn Davis Date: 9/5/2013   |

Sig

Title: Regulatory Affairs Analyst Representing: QEP ENERGY COMPANY



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA

Division Director

August 12, 2014

Valyn Davis QEP Energy Company 11002 East 17500 South Vernal, UT 84078

43 047 403A1 125WD-5-9-24 5. 95 24E

Re:

APDs Rescinded for QEP Energy Company, Uintah County

Dear Ms. Davis:

Enclosed find the list of APDs that you asked to be rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded, effective August 5, 2014.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely.

Environmental Scientist

cc:

Well File

Bureau of Land Management, Vernal



43-047-39464 CWD 13D-32-8-24 43-047-40331 WV 7A-24-8-21 43-047-40341 RWS 12SWD-5-9-24 43-047-15207 RW 34-21A 43-047-15282 RW 34-28A 43-047-40356 NBZ 15D-30-8-24 43-047-40357 CWD 6D-32-8-24 43-047-40358 CWD 2D-32-8-24 43-047-40359 CWD 5D-32-8-24 DE

FORM APPROVED

| UNITED STATES            | SUBMIT IN IRRUICA |
|--------------------------|-------------------|
| PARTMENT OF THE INTERIOR | VERNAL FIFLD      |

**BUREAU OF LAND MANAGEMENT** 

| U I U-/3400 |  |
|-------------|--|
| <br>        |  |

|  | 201                        |   | 6. IF INDIAN, ALLOTTEE                                     | OR TRIBE NAME |  |  |
|--|----------------------------|---|--|---------------|--|--|
| APPLICATION FOR PERMIT   | N/A                        |   |  |               |  |  |
| TYPE OF WORK   |                            | the factor of the state of the | 7. UNIT AGREEMENT NAM                                      | AE            |  |  |
| DRILL 🗹  | DEEPEN 🗆                   | DEPT OF THE INTERIOR<br>BUREAU OF LAND MGMT   | Big V  | /alley        |  |  |
| TYPE OF WELL   |                            | SUNDANC OF EARD MIGHT   | 8. FARM OR LEASE NAME                                      | E, WELL NO.   |  |  |
| □ □ ☑ SINGLE   | MULTIPLE                   | • · · · · · · · · · · · · · · · · · · ·   |  |               |  |  |
| OIL WELL GAS WELL OTHER ZONE   | ZONE                       | . /   | 2WS 128WD  | 1-5-9-24      |  |  |
| 2. NAME OF OPERATOR  | Contact: Rick Car          | terhun/   | 9.API NUMBER:  |               |  |  |
| QUESTAR EXPLORATION & PRODUCTION, CO.  |                            | canterbury@questar.com  | 43-047-40  | 7341          |  |  |
| 3. ADDRESS   | Telphone number            |   | 10. FIELD AND POOL, OR WILDCAT                             |               |  |  |
| •  |                            | 781-4362 Fax 435-781-4395   | Red Wash South   |               |  |  |
| 4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements*)   |                            |   | 11. SEC.,T, R, M, OR BLK & SURVEY OR AREA                  |               |  |  |
| At Surface 2033' FSL 859' FWL  | in oco., i, id, in, on ben | a outter of Area  |  |               |  |  |
| At proposed production zone  | SEC. 5, T9S, R24E S.L.B.M. |   |  |               |  |  |
| 14. DISTANCE IN MILES FROM NEAREST TOWN OR PO  |                            |   | 13, STATE  |               |  |  |
| 35.4+ / - MILES FROM VERNAL, UTAH  |                            | Uintah  | UT   |               |  |  |
| 15. DISTANCE FROM PROPOSED LOCATION TO NEARE   | 16.NO.OF ACRES IN LEASE    | 17. NO. OF ACRES ASSIG  |  |               |  |  |
| PROPERTY OR LEASE LINE, FT.  |                            | ·   | 40   |               |  |  |
| (also to nearest drig,unit line if any)  |                            | 1239.79   |  |               |  |  |
| 859' +/-   |                            |   |  |               |  |  |
| 18.DISTANCE FROM PROPOSED location to nearest well, drilling,  |                            | 19. PROPOSED DEPTH  | 20. BLM/BIA Bond No. ESB000024<br>UIC Bond No. 965-003-769 |               |  |  |
| completed, applied for, on this lease, ft  |                            | 1000  |  |               |  |  |
| 25' +/-  |                            | 1900'   |  |               |  |  |
| 21. ELEVATIONS (Show whether DF, RT, GR, ect.)   |                            | 22. DATE WORK WILL START  | 23. Estimated duration                                     |               |  |  |
| 5127.0' GR   |                            | ASAP  | 10 Days  |               |  |  |
| 24. Attachments  |                            |   |  |               |  |  |
|  |                            |   |  |               |  |  |
| The following, completed in accordance with the requirments of Onshore Oll and Gas Order No. 1, shall be attached to this form:  |                            |   |  |               |  |  |
| 1. Well plat certified by a registered surveyor.  4. Bond to cover the operations unless covered by an exisiting bond on file (see   |                            |   |  |               |  |  |
| 2. A Drilling Plan Item 20 above).   |                            |   |  |               |  |  |
| 3. A surface Use Plan ( if location is on National Forest System Lands, 5. Operator certification.   |                            |   |  |               |  |  |
| the SUPO shall be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be required by the  |                            |   |  |               |  |  |
| authorized officer.  |                            |   |  |               |  |  |
|  |                            |   |  |               |  |  |
|  |                            |   |  |               |  |  |
| 1/1.0-41   |                            |   |  |               |  |  |
| SIGNED Cull Cull Character Name (printed/typed) Rick Canterbury DATE 08/22/2008  |                            |   |  |               |  |  |
|  |                            |   |  |               |  |  |
| TITLE Regulatory Affairs   |                            |   |  |               |  |  |
| (This space for Federal or State office use)   |                            |   |  |               |  |  |
|  |                            |   |  |               |  |  |
| PERMIT NO APPROVAL DATE  |                            |   |  |               |  |  |
| Application approval does not warrant or certify the applicant holds any legal or equitable title to those rights in the subject lesse which would entitle the applicant to conduct operations thereon |                            |   |  |               |  |  |
| CONDITIONS OF APPROVAL, IF ANY:  |                            |   |  |               |  |  |
| Assistant Field Manager  |                            |   |  |               |  |  |
| APPROVED BY Stephan Stoward TITLE (Loting Lands & Mineral Resources DATE 1/11/10   |                            |   |  |               |  |  |
| *See Instructions On Reverse Side VERNAL FIELD OFFICE  |                            |   |  |               |  |  |

NOS APD POSTED 9-2-08 AFMSS# 10 CYSD002 A CONDITIONS OF APPROVAL ATTACHED RECEIVED

**NOTICE OF APPROVAL** 

JAN 25 2010

NO NOS

DIV. OF OIL. GAS & MINIMO



## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT **VERNAL FIELD OFFICE** 170 South 500 East

**VERNAL, UT 84078** 

(435) 781-4400



## CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

Questar Exploration & Production, Co Location:

RWS 12SWD-5-9-24

API No: 43-047-40341 Lease No:

Agreement:

NWSW, Sec. 5, T9S, R24E

UTU-73456 **Big Valley Unit** 

**OFFICE NUMBER:** 

(435) 781-4400

**OFFICE FAX NUMBER:** 

(435) 781-3420

## A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

## NOTIFICATION REQUIREMENTS

| Location Construction (Notify Environmental Scientist)       | - | Forty-Eight (48) hours prior to construction of location and access roads.   |  |
|--|---|--|--|
| Location Completion (Notify Environmental Scientist)         | - | Prior to moving on the drilling rig.   |  |
| Spud Notice<br>(Notify Petroleum Engineer)                   | - | Twenty-Four (24) hours prior to spudding the well.   |  |
| Casing String & Cementing (Notify Supv. Petroleum Tech.)     | - | Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut vn opreport@blm.gov.                                  |  |
| BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.) | - | - Twenty-Four (24) hours prior to initiating pressure tests.   |  |
| First Production Notice<br>(Notify Petroleum Engineer)       | - | Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days. |  |



Page 2 of 6 Well: RWS 12SWD-5-9-24 1/7/2010

# SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop
  work and contact the Authorized Officer (AO). A determination will be made by the AO as to what
  mitigation may be necessary for the discovered paleontologic material before construction can
  continue.
- During operations, if any vertebrate paleontological resources are discovered, all operations
  affecting such sites shall be immediately suspended, and all discoveries shall be left intact until
  authorized to proceed by the Authorized Officer. The appropriate Authorized Officer of the Vernal
  BLM office shall be notified within 48 hrs of the discovery, and a decision as to the preferred
  alternative/course of action will be rendered.
- All previous conditions of approval tied to the 12ML-5-9-24 shall be adhered to.

Page 3 of 6 Well: RWS 12SWD-5-9-24 1/7/2010

# DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

None.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily
  drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order
  No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a
  test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's
  log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
  encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
  Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

Page 4 of 6 Well: RWS 12SWD-5-9-24 1/7/2010

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 5 of 6 Well: RWS 12SWD-5-9-24 1/7/2010

#### **OPERATING REQUIREMENT REMINDERS:**

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written communication
  and must be received in this office by not later than the fifth business day following the date on
  which the well is placed on production. The notification shall provide, as a minimum, the following
  informational items:
  - o Operator name, address, and telephone number.
  - Well name and number.
  - o Well location (1/4/4, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1.
   Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4.

Page 6 of 6 Well: RWS 12SWD-5-9-24 1/7/2010

Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
  Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
  future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
  BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
  hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
  be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to
  the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first.
  All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All
  product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in
  accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering
  lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a
  suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be
  obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.





REGION 8 1595 WYNKOOP STREET DENVER, CO 80202-1129 http://www.epa.gov/region8

JAN 1 2 2010

Ref: 8P-W-GW

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Rick Canterbury Questar Exploration and Production Company 11002 East 17500 South Vernal, UT 84078 Accepted by the Utan Division Wining ONLY Cas and Mining ONLY FOR RECORD ONLY

RECEIVED JAN 2 1 2010

DIV. OF OIL, GAS & MINING

Re: FINAL Permit

EPA UIC Permit UT21193-08224

Well: RWS 12SWD 5-9-24 NWSW Sec. 5-T9S-R24E

Uintah County, UT API No.: [NO API#]

43 047 40341

Dear Mr. Canterbury:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed RWS 12SWD 5-9-24 injection well. A Statement of Basis that discusses the conditions and requirements of this EPA UIC Permit, is also included.

Please note that under the terms and conditions of this Final Permit you are authorized only to construct the proposed injection well. Prior to commencing injection, you first must fulfill all "Prior to Commencing Injection" requirements of the Final Permit, Part II Section C.1, and obtain written Authorization to Inject from the EPA. It is your responsibility to be familiar with and to comply with all provisions of your Final Permit. The EPA forms referenced in the permit are available at http://www.epa.gov/safewater/uic/reportingforms.html. Guidance documents for Cement Bond Logging, Radioactive Tracer testing, Step Rate testing, Mechanical Integrity demonstration, Procedure in the Event of a Mechanical Integrity Loss, and other UIC guidances, are available at http://www.epa.gov/region8/water/uic/ deep\_injection.html. Upon request, hard copies of the EPA forms and guidances can be provided.

This EPA UIC Permit is issued for the operating life of the well unless terminated (Part III, Section B). The EPA may review this Permit at least every five (5) years to determine whether any action is warranted pursuant to 40 CFR § 144.36(a).

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Jason Deardorff of my staff at (303) 312-6583, or toll-free at (800) 227-8917, ext. 312-6583.

Sincerely,

Stephen S. Tuber
Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

enclosure:

Final UIC Permit

Statement of Basis

cc:

Uintah & Ourav Business Committee

Curtis Cesspooch, Chairman Ronald Groves, Councilman Irene Cuch, Vice-Chairwoman Steven Cesspooch, Councilman Phillip Chimburas, Councilman Frances Poowegup, Councilwoman

Daniel Picard

BIA - Uintah & Ouray Indian Agency

Ferron Secakuku

Director, Natural Resources

Ute Indian Tribe

Larry Love

Director of Energy & Minerals Dept.

Ute Indian Tribe

Gil Hunt

Associate Director

Utah Division of Oil, Gas, and Mining

Fluid Minerals Engineering Office BLM - Vernal Office

# TO THE PROTECT OF

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

1595 Wynkoop Street Denver, CO 80202-1129 Phone 800-227-8917 www.epa.gov/region08

NOV 2 2015

Ref: 8P-W-UIC

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Laura Abrams
QEP Resources
1050 17<sup>th</sup> Street, Suite 800
Denver, Colorado 80265

RE: Underground Injection Control Permit Extensions for EPA Permits:

UT22275-10218 Well: RW 31-32B SWD UT22276-10219 Well: RW 41-32B SWD

Uintah County, Utah

43-047-53998

43-047-53997

Dear Ms. Abrams:

5 9S ZAE

The U.S. Environmental Protection Agency Region 8 has reviewed your October 21, 2015, request for UIC permit extensions for the permits listed above. Your request was submitted in accordance with the requirements stipulated in Part II, Section A.5 of the permit. QEP Resources (QEP) is granted an extension until December 22, 2017. This extension is provided to allow QEP time to properly evaluate the conversion potential of these two wells.

Regarding the other two wells in your request, those two final permits were approved in 2009. The EPA does not intend to extend these two permits, and anticipates a timely "permit cancellation request" for both of the following UIC permit numbers:

UT21241-08420 Well: FR 9P-20-14-20 (proposed conversion)

43-047-39461

₩ UT21193-08224 Well: RW 12SWD-5-9-24 (proposed new drill) 43-047-40341

Please remember that it is your responsibility to be aware of, and to comply with, all conditions of the permits. If you have any questions regarding this approval, please call Bruce Suchomel at (303) 312-6001 or (800) 227-8917, extension 312-6001.

Sincerely,

Derey O'Connor

Acting Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

cc:

## Uintah & Ouray Business Committee

Honorable Shaun Chapoose, Chairman Edred Secakuku, Vice-Chairman Reannin Tapoof, Executive Assistant

Bartholomew Stevens, Superintendent BIA - Uintah & Ouray Indian Agency

Bart Powaukee Environmental Director Ute Indian Tribe

Minnie Grant Air Quality Coordinator Ute Indian Tribe

Bruce Pargeets
Assistant Director of Energy & Minerals Dept.
Ute Indian Tribe

Brad Hill Utah Division of Oil, Gas, and Mining

Robin Hansen Fluid Minerals Engineering Office BLM - Vernal Office